



# UNIVERSITÀ DEGLI STUDI DI PALERMO

<b>DEPARTMENT</b>	Medicina di Precisione in area Medica, Chirurgica e Critica		
<b>ACADEMIC YEAR</b>	2022/2023		
<b>BACHELOR'S DEGREE (BSC)</b>	DENTAL HYGIENE		
<b>INTEGRATED COURSE</b>	HARD DENTAL TISSUE DISEASES - INTEGRATED COURSE		
<b>CODE</b>	18964		
<b>MODULES</b>	Yes		
<b>NUMBER OF MODULES</b>	3		
<b>SCIENTIFIC SECTOR(S)</b>	MED/50, MED/36, MED/28		
<b>HEAD PROFESSOR(S)</b>	GALLINA GIUSEPPE	Professore Ordinario	Univ. di PALERMO
<b>OTHER PROFESSOR(S)</b>	PANZARELLA VERA	Ricercatore a tempo determinato	Univ. di PALERMO
	GALLINA GIUSEPPE	Professore Ordinario	Univ. di PALERMO
	LO CASTO ANTONIO	Professore Associato	Univ. di PALERMO
<b>CREDITS</b>	9		
<b>PROPAEDEUTICAL SUBJECTS</b>			
<b>MUTUALIZATION</b>			
<b>YEAR</b>	1		
<b>TERM (SEMESTER)</b>	2° semester		
<b>ATTENDANCE</b>	Mandatory		
<b>EVALUATION</b>	Out of 30		
<b>TEACHER OFFICE HOURS</b>	<p><b>GALLINA GIUSEPPE</b> Tuesday 10:00 12:00 Uffici di Presidenza del CdS di Medicina e Chirurgia</p> <p><b>LO CASTO ANTONIO</b> Monday 9:00 11:00 I piano, Sezione Scienze radiologiche, DIBIMED</p> <p><b>PANZARELLA VERA</b> Tuesday 13:00 15:00 Piattaforma digitale TEAMS:<a href="https://teams.microsoft.com/j/team/19%3ad753ab8750844cc1abfda57338928e09%40thread.tacconversations?groupId=5680544a-9330-436a-baf4-1e70f0da0e59&amp;tenantId=bf17c3fc-3ccd-4f1e-8546-88fa">https://teams.microsoft.com/j/team/19%3ad753ab8750844cc1abfda57338928e09%40thread.tacconversations?groupId=5680544a-9330-436a-baf4-1e70f0da0e59&amp;tenantId=bf17c3fc-3ccd-4f1e-8546-88fa</a></p>		

**DOCENTE:** Prof. GIUSEPPE GALLINA

<b>PREREQUISITES</b>	<ul style="list-style-type: none"><li>- knowledge of embryology, anatomy and physiology of oral cavity: soft tissues and teeth;</li><li>- knowledge of the mechanisms of flogosis (angioflogosis and histophygosis) and of the immune response local and systemic.</li></ul>
<b>LEARNING OUTCOMES</b>	The student should be able to interact in the diagnosis, set up and maintain treatment plans in dental pathology prevention. The student will also have to demonstrate communication skills with the patient interacting with them and the senior members of the family with the aim to make them understand the type of treatment proposed. The student will have to demonstrate the ability to learn the concepts taught throughout the course, showing the ability to link between them.
<b>ASSESSMENT METHODS</b>	<p>Oral testing. The test aims to evaluate that the student possesses knowledge and understanding of the subjects of the integrated course program, autonomy of judgment, ability to apply the acquired knowledge, specific disciplinary language.</p> <p>Minimum number of questions: the student will have to answer a minimum of three questions, which will cover all the topics of the integrated course program, with reference to the suggested texts.</p> <p><b>ORAL ASSESSMENT AND ITS CRITERIA</b></p> <p>Testing is in thirty, as shown below.</p> <ul style="list-style-type: none"><li>- Rating: 30 - 30 and L - Rating: Excellent - ECTS grades: Excellent (A - A +)</li></ul> <p>Outcome: Excellent knowledge of the content of teaching. The student It demonstrates high analytical-synthetic capacity and is able to apply the Knowledge to solve complex problems.</p> <ul style="list-style-type: none"><li>- Rating: 27 - 29 - Rating: Excellent - ECTS grades: Very good (B)</li></ul> <p>Outcomes: Excellent knowledge of teaching content and excellent property language. The student demonstrates analytical-synthetic ability and ability to Applying knowledge to solve problems of complexity and, in some cases Cases, even high.</p> <ul style="list-style-type: none"><li>- Rating: 24 - 26 - Rating: Good - ECTS grades: Good (C)</li></ul> <p>Outcome: Good knowledge of teaching content and good knowledge of language. The student is able to apply the knowledge to solve Complex media problems.</p> <ul style="list-style-type: none"><li>- Rating: 21 - 23 - Rating: Discreet - ECTS grades: Satisfactory (D)</li></ul> <p>Outcome: Discreet knowledge of the content of teaching, in some cases Limited to the main topics. Acceptable ability to use language Specific discipline and apply the knowledge autonomously acquired.</p> <ul style="list-style-type: none"><li>- Rating: 18 - 20 - Rating: Sufficient - ECTS grades: Sufficient E</li></ul> <p>Outcome: Minimum knowledge of the content of teaching, often limited to Main topics. Modesta has the ability to use the specific language of the Discipline and apply the acquired knowledge independently.</p> <ul style="list-style-type: none"><li>- Rating: 1 - 17 - Rating: Insufficient - ECTS grades: Fail (F).</li></ul> <p>Outcome: Does not have an acceptable knowledge of the main content teaching. Poor or no ability to use the language Examination not passed.</p>
<b>TEACHING METHODS</b>	Lessons or seminars.

## MODULE RADIOLOGY

*Prof. ANTONIO LO CASTO*

### SUGGESTED BIBLIOGRAPHY

CARDINALE AE, DI GUGLIELMO L: "Radiologia stomatologica maxillo- facciale", Guido Gnocchi Editore, Napoli, 1994 (ISBN: 978-8879470698). NARDI C, NARDI F, COLAGRANDE S: "Imaging dentale e oro-maxillo-facciale", Verduci Editore, Roma, 2013 (ISBN: 978-8876208881). MALLYA SM, LAM EWN: "White. Pharoah's radiologia odontoiatrica, principi ed interpretazione", Antonio Delfino Editore, Roma, 2021 (ISBN: 8872876516).

<b>AMBIT</b>	10731-Attività formative affini o integrative
<b>INDIVIDUAL STUDY (Hrs)</b>	45
<b>COURSE ACTIVITY (Hrs)</b>	30

### EDUCATIONAL OBJECTIVES OF THE MODULE

To supply the student the bases to understand the methodology of application of imaging techniques in oral and maxillofacial district, health risks related to radiations used to extract images from the human body and radiation protection laws, starting from preliminary informations on radiation physics and radiologic image formation principles, on radiologic devices technology, radiobiology and radiation protection, to finally understand the clinical informations from radiologic reports and images. Ability to understand the application methodology of imaging techniques in oral and maxillofacial district and health risks related to radiations used to extract images from the human body and radiation protection laws. Ability to understand the clinical informations from radiologic reports and images.

## SYLLABUS

Hrs	Frontal teaching
2	History and evolution of oral and maxillofacial radiology
2	Radiation physics: general informations
2	Principles and techniques of analogic and digital image formation
2	Intraoral radiography: paralleling technique, bisecting angle technique, bitewing technique, occlusal techniques
2	Panoramic radiography and teleradiography
2	Principles of fan and cone beam volumetric computed tomography
1	Ultrasound principles
2	Magnetic resonance principles
1	Nuclear medicine principles
4	Radiobiology and Radiation protection
2	Radiographic anatomy of teeth and maxillofacial structures
2	Congenital anomalies of teeth
2	Dental caries
2	Parodontal disease
2	Oncologic radiotherapy principles (with special reference to maxillofacial district)

**MODULE**  
**CARIOLOGY AND ELEMENTS OF CONSERVATIVE DENTISTRY**

*Prof. GIUSEPPE GALLINA*

**SUGGESTED BIBLIOGRAPHY**

- Anatomia dentaria. M. Lautrou. Ed. Masson, Milano.
- Manuale di Disegno e Modellazione dentale. Mangani F., La Manna A. Martina Ed. Bologna.
- Carie dentali. Malattie e trattamento clinico. Fejerskov O., Kidd E.A.M. Antonio Delfino Ed., Roma.
- Propedeutica Clinica Odontostomatologia. Eramo S., Barraco G., Ed. Ariesdue. Milano 2020
- Odontoiatria Restaurativa. Procedure di trattamento e prospettive future. AA.VV.. Masson – Elsevier Ed. Milano.
- Appunti delle Lezioni, Articoli scientifici.

<b>AMBIT</b>	10346-Scienze dell' igiene dentale
<b>INDIVIDUAL STUDY (Hrs)</b>	45
<b>COURSE ACTIVITY (Hrs)</b>	30

**EDUCATIONAL OBJECTIVES OF THE MODULE**

This module covers the fundamental concepts in restorative dentistry. The physiology of the pulpo-dentinal organ. The etiopathogenesis, prevention and basic concepts of diagnosis and therapy of dental caries and its complications. Establish prevention protocols and support the dentist in diagnosis and therapeutic protocols of dental diseases. The relationship between restorative dentistry and periodontal tissues and its interrelations with the stomatognathic function. Clinical and intraoral examination and clinical data recording; dental dam.

**SYLLABUS**

<b>Hrs</b>	<b>Frontal teaching</b>
2	Elements of histology, anatomy and physiology of the enamel and dental-pulp system.
2	Permanent and deciduous teeth nomenclature - Chronology of dental eruption
2	Shapes and teeth Function. Occlusion. Intra and inter-arcade relations
3	Etiopathogenesis, anatomic-clinical classification, prevention end basic concepts in the diagnosis of dental caries and its complications.
1	Basic concepts of pulpitis, necrosis and regressive alterations of the dental pulp.
2	The clinical and instrumental examination for the diagnosis in restorative dentistry
1	Biologic width and its importance in restorative dentistry
2	Designation of cavity surfaces, classification and preparation principles of Black cavity. SI/STA classification
2	Cavity preparation, use, sterilization of the instruments in restorative dentistry
4	Evolution of principles, materials and techniques for sealing.
2	Etiopathogenesis and non invasive treatment of dentinal hypersensitivity.
2	Principles and techniques of enamel adhesion. Basic concepts in dentin-enamel adhesion.
2	Characteristics and basic concepts in clinical use of composites, compomers, glass ionomeric cement.
3	Dental dam.

**MODULE**  
**DENTAL HYGIENE APPLIED TO THE DENTAL HARD TISSUE DISEASES**

*Prof.ssa VERA PANZARELLA*

**SUGGESTED BIBLIOGRAPHY**

-Anatomia dentaria. M. Lautrou. Ed. Masson, Milano. 2 Edz. ISBN: 8821411338

-Appunti delle Lezioni, Articoli scientifici.

<b>AMBIT</b>	10346-Scienze dell' igiene dentale
<b>INDIVIDUAL STUDY (Hrs)</b>	45
<b>COURSE ACTIVITY (Hrs)</b>	30

**EDUCATIONAL OBJECTIVES OF THE MODULE**

The didactic objectives aim at:

- Know the methods of sterilization in the dental area;
- Know oral hygiene techniques and the aids that can be used;
- Knowing how to approach the patient correctly;
- Know the medical record and how to fill it in;
- Know the techniques and materials for teeth whitening;
- Know the techniques and materials for fluoroprophylaxis

**SYLLABUS**

<b>Hrs</b>	<b>Frontal teaching</b>
2	Odontostomatological semeiotics
2	The medical record. Extraoral and intraoral evaluation. The normal parameters of the face. The difference between normal and pathological without making a diagnosis
2	The dental formula: practical applications
2	Demineralization in orthodontic treatment and caries prevention.
2	The mechanisms and reactions of demineralization and remineralization correlate with the factors of the disease.
2	Cariou disease and x-rays
2	Sterilization
2	Sterilization routes. The autoclave criteria. Physical tests.
2	The sterilization tests
4	Whitening: indications and contraindications. Method of administration.
2	Caries risk assessment tests.
2	Toothbrushes, dental floss, pipe cleaners
2	Brushing techniques
2	Bacterial plaque detectors