

Year 2025/2026 480308 - Prosthodontics I

Information about the subject

Degree: Bachelor of Science Degree in Dentistry

Faculty: Faculty of Medicine and Health Sciences

Code: 480308 Name: Prosthodontics I

Credits: 6,00 ECTS Year: 3 Semester: 1

Module: Module 4: Dental Pathology and Therapeutics

Subject Matter: DENTAL THERAPY Type: Compulsory

Field of knowledge: Health Sciences

Department: Dentistry

Type of learning: Classroom-based learning

Languages in which it is taught: English, Spanish

Lecturer/-s:

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Year 2025/2026 480308 - Prosthodontics I

Module organization

Module 4: Dental Pathology and Therapeutics

Subject Matter	ECTS	Subject	ECTS	Year/semester
DENTAL THERAPY	66,00	Cosmetic Dentistry	6,00	4/2
		Orthodontics I	6,00	3/2
		Orthodontics II	6,00	4/1
		Paediatric Dentistry I	6,00	4/1
		Paediatric Dentistry II	6,00	4/2
		Pathology and Dental Therapeutics I	6,00	3/1
		Pathology and Dental Therapeutics II	6,00	3/2
		Pathology and Dental Therapeutics III	6,00	4/1
		Prosthodontics I	6,00	3/1
		Prosthodontics II	6,00	3/2
		Prosthodontics III	6,00	4/1
DENTAL PATHOLOGY	60,00	Dental Traumatology	6,00	5/1
		Dentistry in Special Patients	6,00	4/2
		Emergencies in Dentistry	6,00	5/2
		Legal and Forensic Dentistry	6,00	5/1



Year 2025/2026 480308 - Prosthodontics I

DENTAL
PATHOLOGY

Oral Medicine	6,00	3/1
Oral Surgery I	6,00	4/1
Oral Surgery II - Implantology	6,00	5/2
Pathology of the Temporo-Mandibular Joint and Orofacial Pain	6,00	4/2
Periodontics I	6,00	3/2
Periodontics II	6,00	4/2

Recommended knowledge

Recomended knowledge in oral anatomy, histology and dental anatomy. Also in dental materials and basic occlusion concepts



Year 2025/2026 480308 - Prosthodontics I

Learning outcomes

At the end of the course, the student must be able to prove that he/she has acquired the following learning outcomes:

R1	The student is able to obtain and elaborate a clinical history.
R2	Knows how to carry out an intra and extraoral clinical examination.
R3	The student proves to be competent in recognizing the signs that treatment will be complex and in knowing how to take appropriate measures to deal with them.
R4	Knows the components of the stomatognathic system. Biomechanics and functionality.
R5	Understands the neuroanatomy and physiology of the masticatory system. Mastication - swallowing - aesthetics. Also, integrates the knowledge of the dental articulator and its
	importance in the dentist's daily practice. Static and dynamic occlusion.
R6	Recognizes the generalities of the prosthetic rehabilitations, types of edentulousnesses-types of prosthesis.
R7	Fosters the knowledge of the complete edentulous patient. Functional and morphological changes - their topographic anatomy
R8	Masters the clinical and laboratory sequence in the elaboration of complete prostheses and the handling of biomaterials.
R9	The student is able to solve the problems of the patient who wears prosthesis, to promote the handling of dental articulators - their importance in diagnosis and treatment. Knows the different assembly techniques. Intermaxillary records - articulator programming.
R10	Proves knowledge to elaborate a correct clinical history and the correct handling of the information with the laboratory.
R11	Integrates the concepts of occlusion and its importance in dental work.
R12	Masters the concepts of aesthetics and functions to restore normal function to the completely edentulous patient.
R13	Masters the clinical and laboratory sequence in the production of complete prostheses and the handling of biomaterials.
R14	Promotes the management of dental articulators - their importance in diagnosis and treatment



Year 2025/2026 480308 - Prosthodontics I

R15 Proves knowledge to elaborate a correct clinical history and the correct handling of the information with the laboratory. R16 Masters techniques for making individual trays, primary and secondary measurements. Obtaining the impellers for testing. Establishes a correct design of the prosthesis. R17 Knows the laboratory procedure for the preparation of the prosthesis - different types resin. R18 Masters the concepts of aesthetics and function to recover the normal function of the toothless patient. Masters the concepts of direct-indirect retention. R19 Manages clinically the partial and total edentulous patients in their diagnosis and rehabilitation treatment. Knows how to solve the emergencies of partially and totally edentulous patients. R20 Show ability to take measurements and materials for their application. R21 Takes measurements with silicones and polyether. Knows how to differentiate the types of material and their differences and advantages.



Year 2025/2026 480308 - Prosthodontics I

Competencies

Depending on the learning outcomes, the competencies to which the subject contributes are (please score from 1 to 4, being 4 the highest score):

GENERAL	Weighting			
	1 2 3 4			
CG1 I aCapacity for analysis and synthesis	x			
CG2 I bOrganizational and planning skills	x			

PECIFIC	Weighting		J	
	1	2	3	4
CE A 7 Promote autonomous learning of new knowledge and techniques, as well as motivation for quality.			X	
CE A 9 Understand the importance of maintaining and using records with patient information for subsequent analysis, preserving the confidentiality of the data.			X	
CE C 2Knowing how to perform a complete oral examination, including the appropriate radiographic and complementary examination tests, as well as obtaining appropriate clinical references.			X	
CE C 2:Be able to make an initial diagnostic judgement and establish a reasoned diagnostic strategy, being competent in the recognition of situations requiring urgent dental care.				X
CE D 2Know and apply the basic treatment of the most common oral pathology in patients of all ages. Therapeutic procedures should be based on the concept of minimum invasion and on a global and integrated approach to oral treatment.			X	
CE D 2Know how to plan and carry out multidisciplinary, sequential and integrated dental treatments of limited complexity in patients of all ages and conditions and patients requiring special care.				X
CE D 2'Plan and propose the appropriate preventive measures for each clinical situation.			X	



Year 2025/2026 480308 - Prosthodontics I

CE D 2'Acquire clinical experience under proper supervision.		x
		X
against oral diseases, as well as in the maintenance and promotion of health, both at individual and community level.		

TRANS	NSVERSAL Weighting		I	
	1	2	3	4
1. a.	Analysis and synthesis skills		x	
1. b.	Organizational and planning capacity		x	
1. c.	Oral and written communication in the native language.		x	
1. d.	Knowledge of a foreign language		X	
1. e.	Computer skills		X	
1. f.	Information management capacity		x	
1. g.	Problem solving			x
1. h.	Decision making			x
2. i.	Teamwork			X
2. j.	Multidisciplinary teamwork		x	
2. k.	Work in an international context			
2. l.	Interpersonal skills		x	
2. m.	Recognition of diversity and multiculturalism	1	x	1
2. n.	Critical Reasoning			x
2. o.	Ethical commitment			X
				25



Year 2025/2026 480308 - Prosthodontics I

3. p.	Autonomous learning		x	
3. q.	Adaptation to new situations		x	
3. r.	Creativity		x	
3. s.	Leadership		x	
3. t.	Knowledge of other cultures and customs	x		
3. u.	Initiative and entrepreneurship		x	
3. v.	Motivation for quality			x
3. w.	Sensitivity to environmental and socio-health issues		x	



Year 2025/2026 480308 - Prosthodontics I

Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
	80,00%	MULTIPLE CHOICE TEST: Multiple choice test with one correct answer. This shows to greater extent the contents acquired by the student.
	20,00%	PRACTICAL EXAM: The student carries out a test in which he/she must show by means of practical application the acquisition of certain knowledge. For example, histological or anatomopathological diagnoses, interpretation of images or diagnostic tests.

Observations

- 1.-LAB SESIONS (PRACTICES): 6 SESSIONS.
- -Mandatory assistance to 100% of practical sessions. Only ONE JUSTIFIED and with previous notification absence, under UCV rules
- -Student must PASS the practical sessions in order to get acces to the written exam
- -In case of failing the written exam, the practices mark will be saved, so there is no necessity on doing the practices again in case of cursing the subject again
- -More than one absence will mean the FAILING of the subject and the necesity of cursing the subject again
- -It is mandatory to follow the rules of UCV CLINICS AND LABS, regarding dress code an behaviour **EVALUATION**
- -MUST PASS PRACTICES IN ORDER TO GET ACCES TO WRITTEN EXAM
- -PASS THE WRITTEN EXAM (5/10) IN ORDER TO PASS THE SUBJECT
- LAB PRACTICES (20%) AND WRITTEN EXAM (80%)

In this subject, the possibility of a single assessment is not considered, as the mandatory completion of practical activities with active student participation is required. THE STUDENT IS OBLIGATED TO COMPLY WITH THE REGULATIONS OF THE UCV CLINICS (BOTH IN THE LABORATORY AND THE DENTAL OFFICE), REGARDING: ATTIRE (UCV SCRUBS, SANITARY FOOTWEAR, AND SURGICAL CAP), CARE OF THE FACILITIES, AND BEHAVIOR. FAILURE TO COMPLY WILL RESULT IN A PENALTY/EXPULSION FROM THE PRACTICE.



Year 2025/2026 480308 - Prosthodontics I

MENTION OF DISTINCTION:

In accordance with the regulations governing the assessment and grading of subjects in force at UCV, the distinction of "Matrícula de Honor" (Honours with Distinction) may be awarded to students who have achieved a grade of 9.0 or higher. The number of "Matrículas de Honor" (Honours with Distinction) may not exceed five percent of the students enrolled in the group for the corresponding academic year, unless the number of enrolled students is fewer than 20, in which case a single "Matrícula de Honor" (Honours with Distinction) may be awarded. Exceptionally, these distinctions may be assigned globally across different groups of the same subject. Nevertheless, the total number of distinctions awarded will be the same as if they were assigned by group, but they may be distributed among all students based on a common criterion, regardless of the group to which they belong. The criteria for awarding "Matrícula de Honor" (Honours with Distinction) will be determined according to the guidelines stipulated by the professor responsible for the course, as detailed in the "Observations" section of the evaluation system in the course guide.

Learning activities

The following methodologies will be used so that the students can achieve the learning outcomes of the subject:

M1 Lecture.

Problem Solving.

Explanation of contents by the teacher. Explanation of knowledge and skills.

M2 Practical basic sciences laboratory sessions, practical

simulation laboratory sessions, virtual hospital and

dissecting room.

M3 Problem and case solving.

Social action activities.

M4 Group work with research, discussion and filtering information about the degree

subjects.

M6 Discussion and problem solving.

M8 Oral presentations by students.

M9 Group work: group work sessions supervised by the teacher.

Knowledge building through interaction and activity of students.



subjects.

Course guide

Year 2025/2026 480308 - Prosthodontics I

M10 Carrying out bibliographic reviews and practical work experience dissertations.
 M11 Practical in-person classes in clinics linked to the university, where the student will carry out different treatments under direct supervision from the assigned tutor.
 M12 Seminars, supervised monographic classes with shared participation.
 M13 Personal preparation of written texts, essays, problem solving, seminars.
 M15 Personalised Attention. Period of instruction and/or guidance carried out by a tutor with the aim of analysing with the student his/her work, activities and evolution in learning of



Year 2025/2026 480308 - Prosthodontics I

IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
THEORY CLASS M1, M6	R7, R8, R9, R10, R11, R12, R13, R14, R16, R17, R18, R19	30,00	1,20
PRACTICAL CLINICAL SESSION M1, M2	R1, R2, R5, R10, R11, R14	6,00	0,24
SEMINAR M9, M12	R4, R7, R10, R11, R14	2,00	0,08
TUTORING M4, M9, M10	R4, R7, R8	2,00	0,08
EVALUATION M3	R1, R2, R4, R5, R11, R14	4,00	0,16
PRACTICAL CLASS M2, M3, M6, M9, M11, M15	R1, R2, R4, R5, R11, R14	28,00	1,12
TOTAL		72,00	2,88

LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
INDIVIDUAL WORK M3, M10	R4, R5, R6, R7, R8, R9, R10, R11, R12, R14, R16, R17, R18, R19	70,00	2,80
GROUP WORK M2, M4, M9, M10, M12	R4, R5, R8, R11, R12, R16, R17, R18	8,00	0,32
TOTAL		78,00	3,12



Year 2025/2026 480308 - Prosthodontics I

Description of the contents

De	scriptio	n of	the	necessary	contents	to	acquire	the	learning	outcomes.	

Theoretical contents:

Content block Contents



Year 2025/2026 480308 - Prosthodontics I

LECTURES

BLOCK I: GENERALITIES OF STOMATOLOGICAL PROSTHESIS

- 1.Presentation Objectives Requirements Materials Bibliography Types of prostheses Generalities History of prosthetics
- 2.Stomatognathic System Components Anatomy Biomechanics Functionality Neuroanatomy
- 3.Physiology of the stomatognathic system Mastication Swallowing Aesthetics

BLOCK II OCCLUSION

- 1.History Components Dental Alignment Mandibular Movements
- 2.Optimal functional occlusion Direct and indirect determinants Anterior guidance Occlusion schools
- 3.Articulators Concepts Types of articulators FacebowRecords Work sequence Clinical application

BLOCK III REMOVABLE COMPLETE PROSTHESIS (RCP), CLINIC AND LABORATORY

- 1.Diagnosis in RCP Characteristics of edentulous patients General and oral clinical examination Topography Clinical history Edentulous facial features Positive and negative zones Frenulum and ridges
- 2.Principles of retention, stability, and support Primary impressions Types of trays Impression materials Anatomical and functional zero line Preparation of the primary model Making the individual tray
- 3.Secondary measurements Muscular trimming Testing and verification of the individual tray Impression materials Edge protection Making the secondary model Split cast Making the registration rim
- 4.Mounting the upper model Facebow Types of articulators Camper's plane Occlusal plane Frankfurt Fox plane
- 5.Mounting the lower model Gothic arch Types of records Vertical dimension Phonetic and aesthetic tests
- 6.Mounting teeth Types of teeth Occlusion and disocclusion schemes Color, shape, size Aesthetics
- 7.Tooth test Clinical assessment Aesthetic and phonetic appearance Occlusion Molding Polymerization Types of resin Remounting Polishing
- 8.Placement of the prosthesis in the mouth Adjustments Corrections Instructions Follow-ups



Year 2025/2026 480308 - Prosthodontics I

- 9.Maintenance of RCP patients Emergencies Complications Immediate complete prosthesis Hard and soft rebase
- 10.Digital workflow Generalities CAD/CAM Types of scanners Digital impression Application in complete edentulism

BLOQUE II: OCLUSIÓN

- 4- Historia-Componentes-Alineación Dentaria-Movimientos mandibulares.
- 5- Oclusión funcional óptima-Determinantes directos e indirectos-Guía anterior-Escuelas de oclusión.
 6-Articuladores-Conceptos-Tipos de arcos faciales-Registros-Secuencia de trabajo-Su aplicación clínica.



Year 2025/2026 480308 - Prosthodontics I

BLOQUE III: PRÓTESIS REMOVIBLE TOTAL (PRT), CLÍNICA Y LABORATORIO

- 7- Diagnóstico en PTR-Características del paciente desdentado total-Examen clínico general y bucal-Topografía-Historia clínica-Facies del edéntulo-Zonas positivas y negativas-Frenillos y bridas.
- 8- Principios de retención, estabilidad y soporte-Impresiones primarias-Tipos de cubetas-Elección de cubetas-Materiales de impresión-Línea cero anatómica y funcional-Preparación del modelo primario-Confección de la cubeta individual.
- 9- Medidas Secundarias-Prueba y verificación de la cubeta individual-Materiales de impresión-Recorte muscular-Protección de bordes-Confección de modelo secundario-Split cast- Confección de rodete de registro.

 10- Montaje del modelo superior-Arco facial arbitrario-Tipos de articulador- Arcon -No arcon-Plano oclusal-Plano de Camper, Francfort y de Fox.
- 11- Montaje del modelo inferior-Arco gótico-Tipos de registro-Dimensión vertical-Pruebas fonéticas -Pruebas estéticas.
- 12- Montaje de dientes. Tipos de dientes. Esquemas de oclusión y de desoclusión-Color -Forma-Tamaño-Estética.
- 13-Prueba de dientes- Valoración clínica-Aspectos estético, fonético y oclusales-Enmuflado-Polimerización-Tipos de resina -Remontaje-Pulido.
- 14- Colocación de la prótesis en

boca-Ajustes-Correcciones-Indicaciones- Controles.

- 15- Mantenimiento del paciente portador de PTR-Urgencias y solución de complicaciones-Prótesis completa inmediata-Rebase rígido y blando.
- 16- Flujo digital-Generalidades-Cad Cam-Tipos de escaner-Impresión digital-Su aplicación en el desdentado completo.



Year 2025/2026 480308 - Prosthodontics I

Temporary organization of learning:

Block of content	Number of sessions	Hours
LECTURES	4,00	8,00
BLOQUE II: OCLUSIÓN	10,00	20,00
BLOQUE III: PRÓTESIS REMOVIBLE TOTAL (PRT), CLÍNICA Y LABORATORIO	22,00	44,00

References

REMOVABLE COMPLETE PROSTHESISCollection: Fundamentals, Techniques, and Clinical Practice in Oral Rehabilitation - Volume 2Hachaace Editorial - 2002Héctor Álvarez Cantoni - Norberto Fassina

OCCLUSION AND TEMPOROMANDIBULAR DISORDERS Doyma Editorial J. Okesson SUPPLEMENTARY BIBLIOGRAPHY

EVALUATION, DIAGNOSIS, AND TREATMENT OF OCCLUSAL PROBLEMSSalvat

EditorialPeter Dawson

COMPLETE PROSTHESISEsselvier EditorialB. Koeck