



UNIVERSITY MEDICAL  
& DENTAL COLLEGE

# STUDY GUIDE

## BLOCK 5

# THEORY

## PHYSIOLOGY

CODE	SPECIFIC LEARNING OUTCOMES	TOPIC
EnC-P-001	Enlist the major endocrine glands and their hormones.	Introduction to Endocrinology
	Classify hormones broadly based on chemical structure (peptide, steroid, amine).	
	Differentiate between surface and intracellular hormone receptors.	
	Explain the basic concept of feedback control in hormone secretion	
EnC-P-002	Describe the basic anatomy of pituitary gland and its relation to hypothalamus.	Pituitary Hormones and Their Control by the Hypothalamus
	Identify the main hormones of the anterior and posterior pituitary and state their primary functions	
	Outline the effects of growth hormone on growth and metabolism	
	Explain the pathophysiology of growth-related disorders—dwarfism, gigantism, and acromegaly.	
	Describe the main functions of ADH (in water balance) and oxytocin (in labor and lactation).	
EnC-P-003	Outline the basic functions of thyroid hormones.	Thyroid Gland
	Discuss the salient clinical features of major thyroid disorders: hyperthyroidism, hypothyroidism, cretinism, and myxedema	
EnC-P-004	Outline the basic functions of parathyroid hormone, calcitonin, and vitamin D in calcium and bone metabolism.	Calcium Regulating Hormones
	Describe clinical conditions associated with calcium imbalance: hypoparathyroidism, hyperparathyroidism, rickets, osteomalacia, and osteoporosis.	

EnC-P-005	Name the main adrenal cortical hormones and describe the physiological functions of cortisol, and aldosterone.	Adrenal Glands
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	Discuss the salient features of Cushing's syndrome and Addison's disease.	
EnC-P-006	Describe the main actions of insulin and glucagon on carbohydrate, protein, and fat metabolism	Pancreas
	Differentiate between Type I and Type II diabetes mellitus based on etiology and pathophysiology.	
	Discuss the general features and complications of diabetes mellitus.	

### BIOCHEMISTRY

CODE	SPECIFIC LEARNING OUTCOMES	TOPIC
EnC-B-001	Outline the main steps of thyroid hormone synthesis (iodide uptake, iodination, coupling, storage, release)	Synthesis of Thyroid and Parathyroid Hormones
	State how parathyroid hormone is synthesized and its role in calcium regulation	
EnC-B-002	Describe, in simple terms, how insulin and glucagon are produced in pancreatic islet cells	Synthesis of Insulin and Glucagon
	Explain the clinical significance of C-peptide (marker of insulin secretion)	
	Compare key features of Type 1 and Type 2 diabetes mellitus	
	Describe the pathways of beta-oxidation and ketogenesis and explain their metabolic significance.	
EnC-B-003	Describe vitamin D and its active form, sources, RDA, biochemical roles, and deficiency manifestations.	Vitamins
EnC-B-004	Describe metabolism of calcium	Calcium

### PHARMACOLOGY & THERAPEUTICS

CODE	SPECIFIC LEARNING OUTCOMES	TOPIC
EnC-Ph-001	State the major effects of insulin on body tissues	Antidiabetic drugs: Insulin
	Classify types of insulin (short, intermediate, long-acting)	
	Describe the uses and common side effects of insulin	
	Recognize newer agents (SGLT2 inhibitors, incretin mimetics, DPP-4 inhibitors) at a basic level	
EnC-Ph-002	List the main groups of oral antidiabetic drugs (e.g., sulfonylureas, metformin, thiazolidinediones)	Oral antidiabetic drugs
	Explain in simple terms how these drugs lower blood glucose	
	Identify common side effects and contraindications	
EnC-Ph-003	Outline the synthesis and functions of thyroid hormones	Thyroid hormones & Antithyroid drugs
	State the drugs used in hypothyroidism	
	Explain the mechanism of action of main antithyroid drugs	
	Recognize the role of iodides and beta blockers in hyperthyroidism	
	List common toxicities of antithyroid drugs	
EnC-Ph-004	Recall the main adrenal steroid hormones (cortisol, aldosterone)	Adrenal hormones – I

	Recognize some synthetic glucocorticoids	
	Differentiate between short-, intermediate-, and long-acting glucocorticoids.	
EnC-Ph-005	Describe the main pharmacological effects and therapeutic uses of glucocorticoids.	Adrenal hormones – II
	Outline their major adverse effects and precautions corticosteroids	

	Explain the clinical implications and monitoring considerations in long-term steroid use	
	Describe their pharmacokinetics, mechanism of action, pharmacological effects, uses, adverse effects, drug interactions and contraindications of Corticosteroid Antagonists	

### GENERAL PATHOLOGY & MICROBIOLOGY

CODE	SPECIFIC LEARNING OUTCOMES	TOPIC
EnC-Pa-001	Discuss the microbiological characteristics, disease spectrum and brief diagnosis of Prevotella.	Prevotella
EnC-Pa-002	Discuss the microbiological characteristics, disease spectrum and brief diagnosis of Bacteroides.	Bacteroides
EnC-Pa-003	Discuss the microbiological characteristics, disease spectrum and brief diagnosis of Lactobacillus	Lactobacillus
EnC-Pa-004	Discuss the microbiological characteristics, disease spectrum and brief diagnosis of Clostridium perfringens	Clostridium perfringens
EnC-Pa-005	Discuss the microbiological characteristics, disease spectrum and brief diagnosis of firmicutes	Firmicutes
EnC-Pa-006	Discuss the microbiological characteristics, disease spectrum and brief diagnosis of staphylococci	Staphylococci
EnC-Pa-007	Discuss the microbiological characteristics, disease spectrum and brief diagnosis of HIV and its relation with dental surgery.	HIV

## THEORY

### ORAL BIOLOGY & TOOTH MORPHOLOGY

CODE	SPECIFIC LEARNING OUTCOMES	TOPIC
Oc2-OB-001	Define the biological features of the temporomandibular joint relevant to occlusion, including the structure and function of the articular disc, synovial fluid, and cartilage adaptation	TMJ & Oral Biology
	Explain the neuromuscular control of mandibular movement, including the role of muscle spindles, Golgi tendon organs, and the central nervous system in maintaining occlusal stability.	
Oc2-OB-002	Describe occlusal curves and explain their significance in masticatory efficiency	Occlusal Curves & Arch Form
	Explain the concept of arch form	
	Describe the normal dental arch forms (tapered, ovoid, square)	
	Define supporting cusps and guiding cusps, and explain their functional role in occlusion.	
Oc2-OB-003	Explain the basic concepts of facial growth and bone remodeling Describe various facial types and profiles.	Facial Growth, Facial Types & Bone remodeling

### PERIODONTOLOGY

CODE	SPECIFIC LEARNING OUTCOMES	TOPIC
Oc2-Pe- 001	Explain the basic concepts of periodontology, including the structure and function of the periodontium and its role in maintaining oral health.	Periodontium & Occlusal Response
	Describe the Physiology of Mastication and the role of mechanoreceptors in the PDL in regulating occlusal biting forces.	

Describe the role of the periodontal ligament (PDL) in occlusal function, including mechanoreception, proprioception, and tooth mobility.

**PROSTHODONTICS**

CODE	SPECIFIC LEARNING OUTCOMES	TOPIC
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Oc2-PD-001	Explain the characteristics of ideal occlusion in natural dentition and its significance for oral function and health.	Characteristics and Significance of Ideal Occlusion
	Define the Anterior & posterior determinants (TMJ morphology, condylar guidance) incisal guidance, canine guidance of occlusion).	
	Define & differentiate between static occlusion (centric occlusion, centric relation, maximum intercuspation) and dynamic occlusion (working side, balancing side, protrusive and lateral excursions).	
	Enumerate the key features of occlusion in deciduous, mixed & permanent dentition	

**ORAL & MAXILLOFACIAL SURGERY**

CODE	SPECIFIC LEARNING OUTCOMES	TOPIC
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Oc2-OMFS-001	Describe the biological features of the temporomandibular joint relevant to occlusion	Review of TMJ anatomy & Its Occlusal relevance
	Summarize the anatomy of TMJ, including TMJ ligaments and the muscles of mastication	
	Compare the condyle disc complex and mandibular fossa	
	Explain the role of synovial fluid in joint maintenance	
	Discuss the importance of joint stability and intra-articular pressure	

**ORTHODONTICS**

CODE	SPECIFIC LEARNING OUTCOMES	TOPIC
Oc2-OtD-001	Define Orthodontics & describe the branches of Orthodontics.	Introduction to Orthodontics & Development of Occlusion & Dentition
	Explain the relevance of preventive and interceptive orthodontics to the development of occlusion and dentition during the primary and mixed dentition periods.	
Oc2-OtD-002	Define overjet, and overbite.	Normal Occlusion, Occlusal
	Define and differentiate between ideal occlusion, normal occlusion and malocclusion.	Relationships and Key Characteristics
	Enumerate Andrews' Six Keys of occlusion & its functional significance. What is classification of normal incisor, canine, and molar relationships (using Angle's classification system)	

### Practical / Lab work

#### ORTHODONTICS

CODE	SPECIFIC LEARNING OUTCOMES	TOPIC
Oc2-OtD-003	Measure overjet and overbite accurately using a periodontal probe or ruler using study models.	Overjet & Overbite
Oc2-OtD-004	Classify occlusion based on Angle's classification using study models.	Angle's classification

#### THEORY

#### COMMUNITY & PREVENTIVE DENTISTRY

CODE	SPECIFIC LEARNING OUTCOMES	TOPIC
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CDPH2-CD-001	Define oral health promotion and outline its key principles	Oral health promotion
	Apply the principles of health promotion and disease prevention to design oral health strategies.	
	Describe the five areas for action in the Ottawa Charter and illustrate each with oral health examples.	
	List potential partners and community settings for oral health promotion activities	
CDPH2-CD-002	Define and classify dental auxiliaries, and describe their roles in oral health delivery systems	Dental Auxiliaries
CDPH2-CD-003	Discuss the Primary Health Care (PHC) approach and explain the principles of the Alma-Ata Declaration.	Introduction to the health care system
	Outline factors influencing the development and evaluation of healthcare systems.	
	Describe the different components of a healthcare system	
	Outline the criteria for evaluating healthcare systems	
CDPH2-CD-004	Define quality in healthcare and explain the quality assurance/audit cycle.	Quality assurance cycle
	Discuss the models of access to healthcare and apply the concept practically in a dental setting.	
CDPH2-CD-005	Define planning and explain the steps of the rational planning model for dental services.	Planning dental services
	Describe evaluation and its types, and identify the range of information needed for dental service planning.	
	Define concepts of need	

	Outline the stages necessary in planning strategy.	
CDPH2-CD-006	Explain the basic principles of health economics and outline payment and remuneration systems in oral health care.	Financing oral health care
	Explain the Health goals of a program	
CDPH2-CD-007	Describe common problems with healthcare delivery	Problem with health care services and health care system
	Discuss different barriers to dental care reception	
	Define the terms 'access to care /and barriers to care	
	Outline how the barriers to care might be overcome for disadvantaged groups	
CDPH2-CD-008	Define determinants of health and equality	Dental Public Health
CDPH2-CD-009	Describe the educational process with its domains	Oral Health Education
	Explain the concept of educational theories/ models	
	Define Oral health education, its settings, and approaches	
	Describe the objectives of oral health education	
	Identify principles of oral health education	
	Explain the steps in planning Oral Health Education	
	Discuss the three levels of prevention of oral diseases	
	Discuss the health care system and the levels of prevention per Pakistani system	

<b>BEHAVIORAL SCIENCES</b>		
<b>CODE</b>	<b>SPECIFIC LEARNING OUTCOMES</b>	<b>TOPIC</b>
CDPH2-BhS-001	Describe strategies to strengthen emotional intelligence (EQ) and apply cognitive abilities effectively in dental settings.	Emotional Intelligence (EQ)
CDPH2-BhS-002	Describe how genetic, environmental, and social factors shape personality and intelligence in dental professionals and patients.	Personality Factors
CDPH2-BhS-003	Explain the interplay of nature vs nurture in shaping behaviours and characteristics relevant to dental practice.	Nature vs Nurture
CDPH2-BhS-004	Utilize reinforcement, motivation, and feedback, and apply Behaviourism, Social Learning Theory (Bandura), and Cognitive Theory to achieve effective oral health behaviour change in dental patients.	Learning Theories
CDPH2-BhS-005	Define motivation, distinguish intrinsic from extrinsic types, and apply motivational theories to improve treatment adherence in dental patients.	Motivational Theories
CDPH2-BhS-006	Describe and apply the Health Belief Model to promote preventive and treatment-related oral health behaviours in dental patients.	Health Belief Model
CDPH2-BhS-008	Explain basic counselling principles and the role of counselling in dental healthcare.	Counselling Principles
CDPH2-BhS-008	Compare paternalistic, shared, and informed doctor-patient relationship models and apply them to guide clinical interactions in dentistry.	Doctor-Patient Relationship Models
CDPH2-BhS-009	Recognize signs of anxiety, depression, and psychological distress in dental patients.	Psychological Distress -- Recognition
CDPH2-BhS-010	Initiate appropriate referral to mental health services or apply CBT-based management strategies for distressed dental patients.	Psychological Distress -- Management
CDPH2-BhS-011	Explain how family dynamics, parenting styles, and help-seeking behaviors influence dental attendance and patient cooperation.	Family Dynamics & Help-Seeking

CDPH2-BhS-012	Describe how socioeconomic factors and social constructs (gender roles, stigma, cultural norms) shape oral health perceptions and outcomes.	Social Constructs & Inequalities
CDPH2-BhS-013	Explain the relationship between stress, psychosocial factors, and oral health outcomes and assess impact on quality of life.	Psychosocial Impact on Oral Health
CDPH2-BhS-014	Describe psychosocial aspects of chronic illness and hospitalization and their impact on dental care and patient cooperation.	Chronic Illness & Hospitalization
CDPH2-BhS-015	Explain palliative care principles, psychosocial support strategies, and management of medically unexplained oral symptoms in dental and oral oncology settings.	Palliative & Special Care
CDPH2-BhS-016	Describe the SPIKES protocol and explain principles of breaking bad news in dental scenarios.	Breaking Bad News -- Principles
CDPH2-BhS-017	Identify ethical dilemmas in dental practice (autonomy, consent, confidentiality) and apply established bioethical frameworks (beneficence, non-maleficence, justice) to analyze and resolve them.	Ethical Dilemmas -- Frameworks Professional Responsibility
	Reflect on professional responsibilities when navigating ethical conflicts involving cultural sensitivity, dual obligations, and patient welfare.	
CDPH2-BhS-018	Recognize how behavior affects oral health outcomes and develop evidence-based strategies to promote healthy oral behaviors.	Behavioural Influences on Oral Health
CDPH2-BhS-019	Evaluate factors influencing patient adherence and apply behavior change strategies to improve oral health outcomes. Explain the impact of low health literacy on oral health outcomes and treatment adherence.	Patient Adherence
CDPH2-BhS-020	Recognize signs of stress and burnout in dental professionals and apply evidence-based coping strategies to maintain wellbeing and clinical performance.	Dentist Stress & Burnout

## PRACTICALS / LAB WORK

### COMMUNITY & PREVENTIVE DENTISTRY

CODE	SPECIFIC LEARNING OUTCOMES	TOPIC
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CDPH2-CD-010	Deliver a short OHE message to classmates using lab models (tooth models, charts, typodonts).	Oral Health Education
CDPH2-CD-011	Classify example cases into primary, secondary, and tertiary prevention using different scenarios	Levels of Prevention Classification
CDPH2-CD-012	Conduct a community-based periodontal health assessment by performing structured history taking and CPITN screening using WHO criteria, and determine periodontal treatment needs.	Community Visit 2: Periodontal Health Assessment Activity

### BEHAVIORAL SCIENCES

CODE	SPECIFIC LEARNING OUTCOMES	TOPIC
CDPH2-BhS-021	Apply structured advanced communication and demonstrate interprofessional teamwork in complex patient scenarios.	Advanced Communication
CDPH2-BhS-022	Demonstrate non-judgmental, culturally sensitive communication with patients affected by stigma or social barriers.	Cultural Sensitivity & Health Disparities
CDPH2-BhS-023	Implement appropriate behaviour change techniques (e.g., motivational interviewing, goal setting) to improve patient adherence to oral health recommendations in a simulated consultation.	Behaviour Change Strategies
CDPH2-BhS-024	Differentiate biological and environmental factors in dental case scenarios and explain their impact on patient behaviour.	Case Analysis -- Nature vs Nurture
CDPH2-BhS-025	Demonstrate professional behaviour in dental practice by effectively resolving complaints, maintaining confidentiality, patient refusal and applying ethical decision-making.	Ethical dilemmas
CDPH2-BhS-026	Demonstrate the SPIKES protocol in a simulated bad news consultation.	Breaking Bad News (SPIKES)
CDPH2-BhS-027	Apply MI techniques to improve patient adherence to oral hygiene.	Motivational Interviewing

CDPH2-BhS-038	Demonstrate ethical informed consent ensuring autonomy and patient understanding.	Informed Consent
CDPH2-BhS-029	Respond appropriately to safeguarding scenarios including child abuse and domestic violence.	Safeguarding
CDPH2-BhS-030	Analyze patient misinformation and recommend an evidence-based management strategy.	Misinformation Management
CDPH2-BhS-031	Manage aggressive, anxious, or non-adherent patients using behavioural approaches without compromising ethics.	Managing Difficult Patients
CDPH2-BhS-032	Manage a simulated anxious patient using advanced behavioural desensitization and structured reassurance techniques beyond Tell-Show-Do.	Advanced Dental Anxiety Management

## THEORY

### SCIENCE OF DENTAL MATERIALS

CODE	SPECIFIC LEARNING OUTCOMES	TOPIC
DMPD2-DM-001	Outline the essential requirements of direct filling restorative materials.	Fundamental Requirements of Direct Restorative Materials
DMPD2-DM-002	Describe and relate the function of each component of dental amalgam alloy to its physical properties.	Dental Amalgam -Composition
	Explain the role of the mercury–alloy ratio and its effect on the setting reaction and long-term performance of amalgam restorations.	
	Correlate the manipulation parameters of amalgam with the mechanical and physical properties of the final restoration.	
	Evaluate the evidence on amalgam toxicity and justify its clinical safety in comparison with other environmental and dietary sources of mercury exposure.	

	<p>Explain mercury hygiene guidelines and describe the protocols for safe amalgam waste disposal.</p>	
DMPD2-DM-003	<p>Define the hybrid layer. Explain how resin infiltrates and demineralizes dentin to create the “interdiffusion zone”.</p>	Dentin bonding agents
	<p>Explain why bonding to wet, organic dentin is harder than bonding to dry, inorganic enamel.</p>	
	<p>Describe how this cutting debris is either removed or modified by different bonding systems.</p>	
	<p>Differentiate the specific roles of the Etchant(acid), Primer(monomer) and Adhesive(resin).</p>	
	<p>Categorize agents by generation (1st - 8th) and by strategy (Etch and Rinse vs. Self-Etch)</p>	
	<p>Explain how keeping dentin moist prevents the collapse of collagen fibers during the procedure.</p>	
DMPD2-DM-004	<p>Describe the composition. Detail the roles of the organic matrix (Bis-GMA), inorganic fillers and the silane coupling agent in the composition structure</p>	Composites
	<p>Categorize materials based on filler particle size(Macro, Micro, Hybrid, Nano, Bulkfill) and explain how this determines clinical use.</p>	
	<p>Explain the polymerization process. Describe the chemical stages of light-activation and the function of the photo-initiator Camphorquinone.</p>	
	<p>Discuss polymerization shrinkage. Explain the mechanism of “setting stress” and how it leads to marginal microleakage and post-operative sensitivity.</p>	
	<p>Analyze the C-Factor(configuration factor). Describe the relationship between bonded and unbonded tooth surfaces and how it dictates incremental layering.</p>	
	<p>Differentiate material properties. Compare the viscosity, flow and mechanical strength of Flowable vs. Packable composites.</p>	
	<p>Explain the role of Coupling Agent. Describe how Silane creates a chemical bond between the filler particles and the resin matrix to ensure structural integrity.</p>	

DMPD2-DM-005	Outline finishing and polishing protocol. Describe the sequence of using abrasive instruments to achieve a surface that resists plaque accumulation.	Dental Cements
	Classify dental cements according to composition and clinical use.	
	Differentiate between temporary and permanent cements based on composition, strength, and clinical application.	
	Explain the manipulation, setting characteristics, and clinical applications of major dental cements including zinc phosphate, GIC, calcium hydroxide, zinc polycarboxylate and ZOE.	
	Describe the chemical composition and key properties of Glass Ionomer Cements GIC.	
DMPD2-DM-006	Correlate the constituents of GIC with its physical and biological properties.	Glass Ionomer Cements
	Explain the setting reaction, fluoride release ion exchange and environmental interaction mechanisms of GIC.	
	Explain the rationale behind the development of resin-modified glass ionomers and describe their advantages over conventional glass ionomer cements.	
	Explain how modifications in GIC composition influence material properties and clinical performance.	
	Describe the composition, properties and clinical indications of metal-reinforced glass ionomers (cermet's).	

**OPERATIVE DENTISTRY**

CODE	SPECIFIC LEARNING OUTCOMES	TOPIC
DMPD2-OD-001	Outline the principles and steps of tooth preparation for class I amalgam cavity design on mandibular molars, maxillary molars and premolars utilizing principles of cavity preparations.	Class I cavity preparation for amalgam
DMPD2-OD-002	Understand the objectives of pulp protection and clinical considerations	Linings and Bases

DMPD2-OD-003	Describe the principles of restoration design for amalgam, including condensation, carving, finishing, and the factors influencing marginal integrity and longevity of the restoration	Amalgam Restorations in Class I
DMPD2-OD-004	Describe the indications and case selection for Class I composite restorations.	Class I Composite Restorations
	Explain conservative cavity design principles for posterior adhesive restorations.	
	Explain polymerization shrinkage and C-factor in posterior composites.	
	Discuss finishing, polishing, and occlusal adjustment protocols to optimize restoration longevity.	
	Describe common clinical complications (e.g., postoperative sensitivity, marginal leakage, open contacts, overhangs) and discuss preventive strategies.	
<b>PRE-CLINICAL PROSTHODONTICS</b>		
<b>CODE</b>	<b>SPECIFIC LEARNING OUTCOMES</b>	<b>TOPIC</b>
	<p>Define vertical and horizontal jaw relations.</p> <p>Enlist following features of natural occlusion:</p> <ul style="list-style-type: none"> <li>• Overjet</li> <li>• Overbite</li> <li>• Centric relation</li> <li>• Maximum intercuspation</li> <li>• Condylar guidance, and</li> <li>• Incisal guidance</li> </ul>	

DMPD2-PD-001	Define significant planes for arrangement of teeth:	Establishing Artificial Occlusion
	<ul style="list-style-type: none"> <li>• Facio lingual,</li> <li>• Mesiodistal,</li> <li>• Occlusal plane,</li> <li>• Ridge relation, and</li> <li>• Rotational curve</li> </ul>	
	Define anatomic occlusion in artificial dentition.	
	Correlate features of natural occlusion with artificial dentition.	

## PRACTICAL / LAB WORK

### SCIENCE OF DENTAL MATERIALS

CODE	SPECIFIC LEARNING OUTCOMES	TOPIC
DMPD2-DM-007	Manipulate GIC as luting/lining or base consistency.	Manipulation techniques for Dental Cements
	Mix Zinc phosphate dental cement as luting or base consistency.	
	Manipulate Zinc Oxide Eugenol dental cement	
	Mix Calcium hydroxide (two paste) dental cement as pulp capping agent	
DMPD2-DM-008	Perform trituration with correct mercury-alloy ratio. Also demonstrate condensation, burnishing, finishing and carving.	Dental amalgam

### OPERATIVE DENTISTRY

CODE	SPECIFIC LEARNING OUTCOMES	TOPIC
DMPD2-OD-005	Prepare Class I cavity on typodont for an amalgam restoration (premolars & mandibular molars).	Class I Cavity Preparation for Amalgam
	Demonstrate preparation of a Class I cavity on maxillary molars of typodont.	

DMPD2-OD-006	Apply liners & bases in a prepared cavity.	Pulp protection
DMPD2-OD-007	Perform trituration, condensation, carving, and finishing of amalgam restoration in prepared Class I cavity on a typodont.	Class I Restoration with amalgam
DMPD2-OD-008	Perform quadrant isolation with rubber dam for posterior composite restorations	Quadrant Isolation
DMPD2-OD-009	Prepare conservative Class I cavity on typodont for composite restoration.	Cavity preparation for class I composite restoration
DMPD2-OD-010	Demonstrate adhesive protocol, including: <ul style="list-style-type: none"> <li>i. Etching strategy (total-etch/self-etch)</li> <li>ii. Primer and bonding application</li> <li>iii. Solvent evaporation and light curing</li> </ul>	Adhesion and composite restoration
	Place composite using appropriate incremental techniques to minimize shrinkage stress and establish proper contour and contact.	
<b>DMPD2-OD-011</b>	Finish and polish restorations while maintaining marginal integrity and anatomy.	<b>Finishing and Polishing</b>
	Evaluate and adjust occlusion to ensure proper functional contacts.	
<b>PRE-CLINICAL PROSTHODONTICS</b>		
<b>CODE</b>	<b>SPECIFIC LEARNING OUTCOMES</b>	<b>TOPIC</b>
	Prepare an edentulous cast suitable for the fabrication of a complete denture.	

DMPD2-PD-001	Identify anatomical landmarks on edentulous cast.	Preparation of Edentulous Cast
DMPD2-PD-002	Perform wax-up of trial denture upper base plate ensuring recommended extension and denture base adaptation.	Wax-Up of Upper Base Plate
DMPD2-PD-003	Perform wax-up of trial denture lower base plate ensuring correct border extension and stability.	Wax-Up of Lower Base Plate
DMPD2-PD-003	Demonstrate correct procedure for flasking trial denture upper and lower base plates prior to processing.	Flasking of Upper and Lower Base Plates
DMPD2-PD-004	Perform dewaxing for trial denture upper and lower base plates.	Dewaxing of Upper and Lower Base Plates
DMPD2-PD-005	Perform packing, curing, and finishing of trial denture base plates, ensuring smooth and well-adapted surfaces.	Packing, Curing, and Finishing of Base Plates