

Domain/Objective
<b>Domain A. Foundational Knowledge</b>
<b>1. Biomedical Science</b>
a. Anatomy and physiology (e.g., gross surgical anatomy, dental anatomy, microanatomy, structural anatomy, growth, cardiovascular, endocrine, neural, respiratory systems)
b. Biochemistry and molecular biology (e.g., connective tissue, cell biology)
c. Health and disease processes of immunology (e.g., innate and adaptive immunity, immune deficiencies) pathology, and genetics and epigenetics
d. Microbiology and pathophysiology of inflammation (e.g., biofilm, pathogenic mechanisms, host mediated responses)
e. Pharmacology (e.g., antimicrobials, opioids, analgesics, emergency meds, drug interactions, cardiovascular, respiratory meds, antibacterials, alternative medicine, local anesthetics, sedative and reversal agents, MRONJ)
f. Radiologic and imaging sciences
g. Wound healing (e.g., stages, non-surgical and surgical)
<b>2. Material Science</b>
a. Autografts
b. Allografts
c. Xenografts
d. Alloplasts/synthetics
e. Biologics (e.g., ABPs, EMD, rhPDGF-BB, rhBMP-2)
f. Barrier membranes
g. Hemostatic agents
h. Sutures
i. Periodontal dressings
j. Implant materials (e.g., surface characteristics, micro/macro geometry, thread design)
k. Restorative materials (e.g., dental and implant, cements)
l. Laboratory materials (e.g., additive/subtractive techniques, 3D printing, milling, removable and fixed prosthesis)
<b>3. Statistics and Epidemiology</b>
a. Understand basic statistical principles and hierarchy of evidence for evaluation and interpretation of scientific and clinical literature (e.g., systematic reviews)
b. Interpret and apply evidence regarding established and emerging therapeutic modalities
c. Use epidemiology data to guide and evaluate treatment options (e.g., NHANES findings)

Domain/Objective
<b>Domain B. Diagnosis</b>
1. Interpret relevant medical, dental and social history
2. Interpret vital signs
3. Interpret additional medical assessments (e.g., lab values, medical consultations, etc.)
4. Interpret extra-oral and intra-oral examination of tissues and structures (e.g., oral cancer screening, TMD analysis)
5. Interpret 2-dimensional radiographs
6. Interpret 3-dimensional imaging
7. Assess and evaluate teeth and their existing restorations and replacements (e.g., implants)
8. Interpret oral hygiene parameters (e.g., plaque/biofilm, stain, calculus)
9. Interpret occlusal findings and diagnostic casts (e.g., malocclusion, primary/secondary occlusal trauma)
10. Evaluate comprehensive dental and periodontal findings to include probing depths, attachment levels, bleeding on probing, mobility, furcations, keratinized mucosa dimension, tissue phenotypes, esthetic assessment, mucogingival conditions/deformities including tooth-related factors, implant-related factors
11. Understand the indications and limitations of periodontal assessments (e.g., microbial assessments, biological assays)
12. Determine edentulous ridge dimension and restorative space utilizing appropriate laboratory and imaging techniques
13. Utilize and employ risk assessment analysis or tool
14. Evaluate caries risk and pulp vitality
15. Diagnose all relevant clinical conditions and findings, using referenced classification systems of periodontal and peri-implant diseases and conditions
<b>Domain C. Etiology of Periodontal and Peri-implant Diseases and Conditions</b>
1. Recognize the etiological and contributing factors for periodontal diseases
2. Recognize the etiological and contributing factors for peri-implant diseases
3. Recognize the etiological and contributing factors for developmental and acquired conditions
<b>Domain D. Prognosis</b>
1. Determine short- and long-term individual tooth and overall therapeutic prognosis (periodontal and mucogingival) using tooth and patient related factors
2. Determine short- and long-term implant therapeutic prognosis (pre- and post-placement) using site and patient related factors

Domain/Objective
<b>3. Apply the prognosis to support the development of a comprehensive treatment plan</b>
<b>Domain E. Treatment Planning and Patient Management</b>
<b>1. Develop a problem focused treatment plan (e.g., limited treatment case/prescription surgery)</b>
<b>2. Develop a comprehensive and sequential treatment plan (preventive, functional, aesthetic, and supportive maintenance phases within comprehensive care), which may include medical/dental consultations and referrals</b>
<b>3. Develop a treatment plan that considers ethical and professional dilemmas (e.g., patient needs, wants, financial aspects)</b>
<b>4. Use appropriate stress reduction options:</b>
a. Inhalation
b. Enteral
c. Parenteral
d. Latroседation (e.g. voice inflection, quiet room, sound therapy, aroma therapy, hypnosis)
<b>5. Describe behavioral modification techniques for habits (e.g., tobacco/vaping cessation, oral hygiene, recreational drug use, nutrition) and TMD/myofascial pain treatment.</b>
<b>6. Identify applicable strategies for the management of medically compromised patients</b>
<b>7. Identify appropriate management of patients with special needs</b>
<b>8. Identify elements of proper informed consent for treatment (e.g., risk, benefits, alternative treatments, costs)</b>
<b>9. Incorporate implant placement and prosthetic planning considerations (e.g., analog or digital workflows) into comprehensive and sequential treatment planning</b>
<b>10. Recognize and treat/manage emergency medical issues</b>
<b>Domain F. Periodontal Therapy: Non-Surgical &amp; Surgical</b>
<b>1. Understand principles of non-surgical therapies, including rationale for use and expected outcomes</b>
a. Modification of patient oral hygiene, scaling and root planing, occlusal therapy, and re-evaluation of non-surgical therapy outcomes
b. Adjunctive therapies: Local or systemic antimicrobial therapy, host modulation, alternative therapy (e.g., probiotics, LASER/photodynamic)
c. Modification of restorative and anatomic etiologic factors (open contacts, overhanging restorations, CEPs)
d. Orthodontic therapy in support of periodontal treatment
<b>2. Understand principles of periodontal surgical therapy (excluding implants), including techniques, materials, rationale for use, and expected outcomes</b>

Domain/Objective
a. Gingivectomy and gingivoplasty, periodontal flap procedures, resective surgical procedures (osseous surgery, functional/esthetic crown lengthening), periodontal regeneration (GTR, biologics, bone grafts), root resection/hemisection/bicuspidization
b. Mucogingival surgical procedures: Root coverage (autogenous/non-autogenous), gingival augmentation (autogenous/non-autogenous)
c. Vestibular depth modification (lip repositioning, vestibuloplasty, frenectomy)
d. Tooth extraction (extraction socket healing, intentional replantation, transplantation, ridge preservation) and pre-prosthetic hard and soft tissue surgery (tori removal, pontic site development, alveoloplasty)
e. Periodontal surgery for orthodontic therapy: Periodontally accelerated osteogenic orthodontics (PAOO/SFOT, surgical exposure of unerupted teeth, temporary anchorage devices)
f. LASER surgical therapy (LASER assisted periodontal therapies)
g. Pain and post-operative management and complications
<b>Domain G. Implant-Related Therapy</b>
<b>1. Understand implant site development, including rationale for use and expected outcomes</b>
a. Alveolar ridge preservation following extraction
b. Hard and soft tissue augmentation of edentulous ridges
c. Sinus augmentation: Crestal/transalveolar
d. Sinus augmentation: Lateral window
e. Osseodensification
<b>2. Understand dental implant surgery, including rationale for use and expected outcomes</b>
a. Osseointegration and evaluation of implant stability at placement (torque/stability value)
b. Implant placement (immediate, early, delayed)
c. Management of peri-operative/post-operative complications
d. Management of peri-implant diseases (i.e., Non-surgical [mechanical, chemotherapy, restorative, LASER], Surgical [resective, regenerative, implantoplasty, debridement/disinfection, soft tissue augmentation])
e. Management of peri-implant soft and hard tissue deficiencies (during or after implant placement)
<b>Domain H. Periodontal and Peri-implant Evaluation/Maintenance</b>
<b>1. Establish maintenance intervals and procedures, including periodic periodontal exams (e.g., Periodontal, Peri-implant)</b>
<b>2. Assess post-surgical outcomes (e.g., Periodontal, Peri-implant)</b>
<b>3. Management of post-operative surgical and prosthetic complications, and recurrent disease (e.g., Periodontal, Peri-implant)</b>
<b>Domain I. Oral Pathology and Oral Medicine</b>
<b>1. Develop differential diagnosis of hard and soft tissue lesions</b>
<b>2. Identify appropriate biopsy technique</b>

Domain/Objective
3. Determine definitive diagnosis based on histology, laboratory reports, pathologic consultations
4. Describe how to treat hard and soft tissue lesions
5. Recognize when to refer hard and soft tissue lesions
6. Recognize the oral manifestations of systemic and infectious diseases
<b>Domain J. Implant Restorations</b>
1. Demonstrate in-depth knowledge, rationale for use, and expected outcomes for loading protocols (immediate, early, and delayed)
2. Demonstrate in-depth knowledge, rationale for use, and expected outcomes for implant provisionalization (single, multiple, full arch), including aesthetic considerations, type of restorations (screw retained vs. cemented, material selection)
3. Demonstrate in-depth knowledge, rationale for use, and expected outcomes for definitive restoration (single, multiple, full arch), including aesthetic considerations, type of restorations (screw-retained vs. cemented, material selection)
4. Demonstrate in-depth knowledge and expected outcomes for restorations as a risk factor/indicator for peri-implant diseases and conditions
<b>Domain K. Periodontal and Systemic Relationships</b>
1. Knowledge of the manifestations of systemic diseases and conditions that affect the periodontium
2. Knowledge of the effect of periodontal diseases on systemic health