

SPRINGFIELD TECHNICAL COMMUNITY COLLEGE

ACADEMIC AFFAIRS

Course Number: DHYG 303 Department: Dental Hygiene

Course Title: Clinical Dental Hygiene 3 Semester: Fall Year: 2001

Objectives/Competencies

Course Objective	Competencies
1. Periodontal Charting: Understand the value of thoroughly charting a patient's periodontal condition in an accurate, systematic manner.	1. Discuss the rationale for performing a complete periodontal charting. 2. Identify the significance of the following factors to the periodontal examination: missing teeth; unerupted, impacted, or supernumerary teeth; malpositioned teeth; open contacts; poorly contoured restorations and crowns; prosthetic devices, and carious lesions. 3. Describe the technique for examining and methods of charting the following: mobility, free gingival line, mucogingival line, width or attached gingiva, probing depths, furcations, fremitus, marginal ridge discrepancies, open/loose contacts, recession, overhangs, occlusal traumatism, bleeding, exudate, frenums, and tooth migration. 4. Describe the examination techniques and charting for following: free gingival line, mucogingival line, probing depths, mobility, marginal ridge discrepancies, overhang restorations, furcations, sensitivity to percussion,

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<p>2. Treatment Planning: Design comprehensive treatment plans, adapting the services to the needs and time schedules of the dental patient and the dental hygienist.</p>	<p>occlusion related habits, recession, bleeding, exudate, open and loose contacts, frenum attachments; food impaction areas, fremitus, tooth migration, and width of attached gingiva.</p> <ol style="list-style-type: none"> 5. Given the total gingiva and probing depth, calculate the width of attached gingiva. 6. Calculate the loss of attachment in the presence or absence of recession. <ol style="list-style-type: none"> 1. State the rationale for treatment planning for patients requiring multiple dental hygiene appointments. 2. Differentiate between clinical/objective factors and contributing/subjective factors of dental hygiene care plans. 3. Discuss the four phases of care planning and which services are included in each. 4. Discuss the various factors that enter into the decision making process during care planning. 5. Define "dental hygiene diagnosis." 6. Recognize the recommended interventions for different forms of periodontal disease as outlined in the text. 7. Design a dental hygiene treatment plan by placing treatment procedures in an orderly sequence in the various phases outlined in class. 8. Given assessment data from a variety of cases, including medical history, vital signs, intraoral and extraoral examinations, radiographic surveys, diagnostic casts, and

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<p>3. Periodontal Debridement and Advanced Hand Instrumentation: Develop a thorough understanding of advanced instrumentation for the treatment of patients with moderate to severe periodontal disease.</p>	<p>the patient expectations, design a treatment plan best suited to the specific needs of each patient.</p> <p>9. Given a variety of treatment needs, identify priorities for treatment, including emergency needs, prevention of disease, restorative and surgical needs, and maintenance needs.</p> <ol style="list-style-type: none"> 1. Identify the basic factors a clinician considers when selecting instruments. 2. Discuss conclusions of studies about the efficacy of non-surgical periodontal therapy (NSPT). 3. Compare and contrast results of nonsurgical and surgical therapy. 4. Discuss how the following factors about root anatomy affect instrument selection: <ol style="list-style-type: none"> a. Concave and Convex shapes. b. Width at cervix and apex. c. Length in relation to the epithelial attachment and prognosis. d. Deviations. 5. Explain the relationship between root surface irregularities, furcation involvement, pocket topography, and gingival contour and tone to instrument selection. 6. Differentiate among sickle, universal curets, gracey curets, files, chisels, and hoes by describing the shank, number of cutting edges, blade position, and instrument design. 7. Differentiate among rigid, finishing, and after-five curets

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<p>4. Treatment of acute periodontal conditions: Recognize and</p>	<p>by describing differences in the terminal shanks and blades.</p> <p>8. Differentiate between gracey and Langer curets.</p> <p>9. Describe the blade of a mini-curet.</p> <p>10. Describe the purpose of channel working strokes.</p> <p>11. Explain the rationale for using universal curets as opposed to gracey curets for removal of tenacious subgingival calculus.</p> <p>12. Explain the rationale for using gracey curets as opposed to universal curets on the proximal surfaces of posterior teeth when there is relevant pocket depth.</p> <p>13. Explain the insertions, points of entries, adaptations, and strokes utilized with curets to scale bifurcation areas.</p> <p>14. Describe the purposes and functions of the files, chisels, and hoes.</p> <p>15. Describe the utilization, adaptation, angulation, and working stroke of files, chisels, and hoes</p> <p>16. On a periodontal mannequin, demonstrate the use of files to remove heavy tenacious calculus.</p> <p>17. On a periodontal mannequin, demonstrate the use of gracey curets, mini curets, and files for the removal of calculus in bifurcation areas of convex root surfaces.</p> <p>18. With all instruments, demonstrate the use of firm, continuous overlapping working channel strokes.</p> <p>19. Demonstrate the use of horizontal, vertical and oblique working strokes.</p> <p>20. Demonstrate the use of nontraditional extra-oral fulcrums</p>

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<p>treat acute gingival infections exercising caution and care for the patient.</p> <p>5. Control of Dentin Hypersensitivity: Obtain a thorough understanding of the possible causes of tooth hypersensitivity and the various treatment modalities for it.</p>	<p>to remove tenacious calculus.</p> <ol style="list-style-type: none"> 1. Differentiate between Necrotizing Ulcerative Gingivitis and Necrotizing Ulcerative Periodontitis. 2. Describe the clinical signs and symptoms of acute gingival infections. 3. Describe the typical age of onset for NUG. 4. Describe NUG and NUP in HIV-positive patients. 5. Describe necrotizing stomatitis. 6. Discuss the local factors, stress factors, and systemic factors for acute periodontal infections. 7. Discuss the microbiological etiology of NUG and NUP. 8. Develop a treatment plan for a patient with acute periodontal infection. 9. Describe a periodontal abscess by listing typical clinical signs and symptoms. 10. Compare periapical and periodontal abscesses. 11. Administer appropriate diagnostic tests to differentiate between periapical and periodontal abscesses. <ol style="list-style-type: none"> 1. Discuss the factors that contribute to hypersensitivity including loss of gingiva, loss of cementum, loss of enamel, the role of a smear layer, and other dental factors. 2. Describe the histology of the dentin and how the stimulus of pain is conducted to the brain. 3. Describe the hydrodynamic pain impulse conduction theory.

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<p>6. Panoramic Landmarks: Identify normal landmarks, anomalies, and positioning errors in panoramic radiographs.</p> <p>7. Hepatitis disease transmission and prevention: Recognize the serious implications of viral hepatitis by studying the modes of transmission, methods of prevention, and necessary precautions to take to protect oneself and one's patients.</p>	<ol style="list-style-type: none"> 4. Describe the main objective of the treatment of dentin hypersensitivity. 5. Describe the modes of action and characteristics of an acceptable desensitizing agent. 6. Describe professional treatments of hypersensitivity including the use of fluoride varnish, ferric oxalate, and sodium fluoride treatments. 7. Prescribe recommendations for desensitizing dentifrice to be used on a regular basis. <ol style="list-style-type: none"> 1. Identify and describe the bony landmarks of the maxilla and surrounding structures as viewed on the panoramic radiograph. 2. Identify air space images as viewed on the panoramic radiograph. 3. Identify soft tissue images as viewed on the panoramic radiograph. 4. Identify artifacts on the panoramic radiograph. 5. Identify positioning errors on panoramic radiographs. <ol style="list-style-type: none"> 1. Define hepatitis. 2. Differentiate among Hepatitis A, B, C, D, and E by the description of the virus, methods of transmission, symptoms, description of the infection course, incubation periods, description of the carrier state. 3. Discuss the modes of transmission of each type of hepatitis.

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<p>8. The cancer patient: Understand the importance of giving proper dental treatment for the cancer patient.</p>	<ol style="list-style-type: none"> 4. Describe the protocol for the vaccines for Hepatitis A & B. 5. Discuss the recommended protocol for a needle stick for a known responder and known non-responder, and non-vaccinated person to the hepatitis B vaccination. 1. Discuss the dental preparation of a cancer patient. 2. Describe the possible oral findings that are side effects of cancer therapy. 3. Design a dental hygiene treatment plan for a patient who is anticipating cancer therapy including patient assessment, a prevention program, periodontal therapy, restorations of carious lesions, prosthodontic therapy, removal of nonrestorable teeth, surgical procedures, and endodontic therapy. 4. Describe radiation therapy for an oral cancer patient including types of treatment, dosage and duration of treatment. 5. Identify the oral effects of radiation therapy, including tissue changes. 6. Design a program to treat xerostomia caused by radiation or chemotherapy. 7. Describe the cause and effect of radiation caries. 8. List the oral infections that may be present as a result of cancer therapy. 9. Describe osteoradionecrosis, including its portal of entry, signs, management, prevention, and development.

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<p>9. The geriatric patient: Understand and value the specific needs of the geriatric dental patient.</p>	<ol style="list-style-type: none"> 10. Describe the changes, duration, and management of dysgeusia in a cancer patient. 11. Identify the factors and sequelae of the loss of appetite in cancer therapy patients. 12. Perform a dental hygiene assessment and design a treatment plan for a postradiation therapy patient. 13. Discuss the systemic side effects of chemotherapy. 14. Discuss the oral effects of chemotherapy. 15. Design an oral self care program for a cancer therapy patient. 16. Describe an oral self care program for a cancer therapy patient. 17. Discuss the primary complications of bone marrow transplantation. <ol style="list-style-type: none"> 1. Recognize the general physiologic changes associated with aging. 2. Identify common changes and disorders associated with the geriatric patient. 3. Define osteoporosis. 4. State the causes and risk factors associated with osteoporosis. 5. Describe the relation of osteoporosis to periodontal disease. 6. Define Alzheimer's disease. 7. Recognize the symptoms associated with the early, middle, advanced and terminal stage of Alzheimer's

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<p>10. Radiographic Interpretation: Develop the skills to distinguish between normal and abnormal in dental radiographs in order to diagnose patients' conditions properly.</p>	<p>disease.</p> <ol style="list-style-type: none"> 8. Identify soft tissues of the lips, oral mucosa, tongue, and oral cavity associated with aging. 9. Identify changes of the teeth associated with aging. 10. Identify changes of the periodontium associated with aging. 11. Discuss changes in personal factors that are found common among geriatric patients. 12. Identify oral side effects of common medications that are seen frequently in the geriatric population. 13. Design a preventive care plan for a geriatric patient when given the physiologic condition and medications. 14. Discuss the specific nutritional needs of the geriatric patient. <ol style="list-style-type: none"> 1. Identify the following restorations in dental radiograph by its unique appearance: amalgam, gold, stainless steel crowns, post and core materials, porcelain, porcelain fused to metal crowns, composite, and acrylic crowns. 2. Identify and describe the radiographic appearance of the following dental materials: base materials, metallic pins, gutta percha, silver points, other endodontic materials, removable partial dentures, complete dentures, diatorics, orthodontic bands, brackets and wires, fixed retainers, implants, suture wires, splints and stabilizing arches and wires. 3. Identify the following miscellaneous objects: jewelry,

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	<p>eyeglasses and patient napkin chains.</p> <ol style="list-style-type: none"> 4. Utilize the SLOB rule to localize an object in a radiographic film. 5. Utilize descriptive terminology to describe the following lesions: unicocular lesion, cordicated border, unilocular lesion, noncorticated borders, multilocular radiolucent lesions, inter radicular lesions, pericoronal lesions, alveolar bone loss, focal opacities, target lesions, ulltifocal confluent radiopaque lesions, irregular, ill defined radiopaque lesions, ground glass, mixed lucent-opaque lesions, and soft tissue opacities. 6. Identify the following radiographic entities: crown and root fractures, fractures of the mandible and maxilla, luxation of teeth avulsion, external resorption, internal resorption, pulpal sclerosis, pulpal obliteration, pulp stonres, periapical granuloma, periapical cyst, periapical abscess, condensing osteitis, sclerotic bone, and hypercementosis.