DHYG 220 – PERIODONTOLOGY

Prepared by: Pamela P. Quinn, RDH, BSE, MSEd
DHYG 220 PERIODONTOLOGY

A. **TITLE:** Periodontology

B. **COURSE NUMBER:** 220

C. **CREDIT HOURS:** 2

D. **WRITING INTENSIVE COURSE:** NO

E. **COURSE LENGTH:** 15 weeks

F. **SEMESTER(S) OFFERED:** Fall

G. **HOURS OF LECTURE, LABORATORY, RECITATION, TUTORIAL, ACTIVITY:**
   2 hours of lecture each week

H. **CATALOG DESCRIPTION:** Emphasis is placed on the structural anatomy of the periodontium, microbiology of plaque, and the pathology of periodontal disease. The student will learn to identify risk factors for periodontal disease, the various components of a comprehensive periodontal chart, treatment modalities utilized in the management of periodontally involved patients, appropriate maintenance intervals, as well as the criteria for determining appropriate referral to a periodontal specialist. Two hours of lecture each week.

I. **PRE-REQUISITES/CO-COURSES:** Pre-requisites include matriculation in Dental Hygiene or have permission of instructor. Co-requisite is DHYG 251: Clinical Dental Hygiene II.

J. **GOALS (STUDENT LEARNING OUTCOMES):** By completion of this course, the student will meet the following course learning outcomes which are linked to the institutional learning outcomes. This course provides the foundation knowledge for performing the following program competencies: 1.4, 1.7, 1.8, 1.12, 1.13, 1.15, 1.16, 2.1, 2.2, 2.5, 2.7, 3.1, 3.2, 3.7, 6.5, 6.7, 8.1, 8.2 and 8.4

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<thead>
<tr>
<th>Course Learning Outcomes</th>
<th>Institutional Outcomes</th>
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<tr>
<td>1. Utilize the AAP classification system when classifying a patient’s periodontal status.</td>
<td>3. Prof Competency</td>
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<td>2. Describe the progression of periodontal disease and techniques or surgeries utilized to improve or sustain a patient’s periodontal status.</td>
<td>3. Prof Competency</td>
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<td>3. Identify risk factors that contribute to the advancement of periodontal disease.</td>
<td>3. Prof Competency</td>
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<td>4. Re-evaluate a patient’s periodontal status at follow-up and/or recall appointments.</td>
<td>3. Prof Competency</td>
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<td>5. Determine an appropriate maintenance schedule and make a referral to the periodontist when indicated.</td>
<td>3. Prof Competency</td>
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<td>6. Record all components of a comprehensive periodontal examination and explain why the clinician must perform a comprehensive evaluation at least once annually.</td>
<td>3. Prof Competency</td>
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<td>7. Utilize evidence based research to develop a table clinic.</td>
<td>3. Prof Competency</td>
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M. **EQUIPMENT:** Nabor’s probe

N. **GRADING METHOD:** A – F
   A letter grade will be issued utilizing the following conversion table. All students must achieve a minimum C grade in this course to maintain matriculation in the program.

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<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tr>
<td>A</td>
<td>94 - 100</td>
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<tr>
<td>B+</td>
<td>90 - 93</td>
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<tr>
<td>B</td>
<td>84 - 89</td>
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<tr>
<td>C+</td>
<td>80 - 83</td>
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<tr>
<td>C</td>
<td>75 - 79</td>
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<tr>
<td>D</td>
<td>74 - 70</td>
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<tr>
<td>F</td>
<td>69 or lower</td>
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O. **MEASUREMENT CRITERIA/METHODS:**
   Class Participation & Attendance
   Quiz Scores
   Midterm Exam
   Projects
      a. Comprehensive Periodontal Chart/Written Report
      b. Group Table Clinic
   Final Exam

P. **DETAILED COURSE OUTLINE:**

I. **Periodontal Tissues**
   A. Structures of the Periodontium
   B. Histology of the Gingiva and Supporting Tissues

II. **History of Periodontal Disease**
   A. Pathogenesis of Periodontal Disease
   B. Pathogenesis of Bone Destruction
   C. Periodontal Pockets

III. **Causes of Periodontal Disease**
   A. Risk Factors
   B. Periodontal Pathology

IV. **Microbiology of Periodontal Disease**
   A. Bacteria
   B. Biofilm
   C. Dental Plaque

V. **Host Immune Response**
   A. Body’s Defense Mechanisms
   B. Immune System’s Components
   C. Host Response

VI. **Local Contributing Factors**
   A. Primary & Secondary Occlusal Trauma
   B. Local Factors that Increase Plaque Retention and Pathogenicity

VII. **Systemic Contributing Factors (Oral Systemic Link)**
   A. Tobacco Use
B. Diabetes
C. Osteoporosis
D. Financial Stress
E. Genetics
F. AIDS

VIII. Classification of Periodontal Diseases
A. Plaque and Non-plaque Induced Gingival Diseases
B. Chronic Periodontitis
C. Aggressive Periodontitis

IX. Clinical Periodontal Assessment
A. Mobility
B. Furcation Involvement
C. Fremitis
D. PSR Screening

X. Treatment Planning
A. Assigning a Diagnosis
B. Treatment Sequencing
C. Informed Consent
D. Recall Intervals

XI. Nutrition and Periodontal Disease
A. Relationship Between Nutrition and the Oral cavity
B. Building Healthy Periodontal Tissues
C. Foods that Promote Periodontal Health

XII. Periodontal Surgeries
A. Widman Flap
B. Grafts
C. Osseous Surgeries
D. Guided Tissue Regeneration
E. Post Surgical instructions

XIII. Chemical Agents in Periodontal Care
A. Arestin
B. Perio Chip
C. Atridox
D. Tetracycline Fiber
E. PerioStat

IX. Dental Implants
A. Anatomy of Implant
B. Maintenance of Implants
C. Peri-Implant Disease

Q. LABORATORY OUTLINE: No Lab