

**DH 79 Course Outline as of Spring 2009****CATALOG INFORMATION**

Dept and Nbr: DH 79

Title: PERIODONTICS FOR DH

Full Title: Periodontics for the Dental Hygienist

Last Reviewed: 9/9/2024

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	2.00	Lecture Scheduled	2.00	17.5	Lecture Scheduled	35.00
Minimum	2.00	Lab Scheduled	0	17.5	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	2.00		Contact Total	35.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 70.00

Total Student Learning Hours: 105.00

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly:

**Catalog Description:**

Fundamental foundations for periodontal assessment and scope of therapy by the dental hygienist. In depth understanding of the biological, immunological, clinical and behavioral aspects of the periodontal patient. A review of the anatomical features of the healthy periodontium, the etiology, epidemiology and risk factors of periodontal diseases, the rationale for therapy, critical analysis of patient assessments, current theories of treatment and specific rationales for mechanical and chemotherapeutic techniques.

**Prerequisites/Corequisites:**

Course Completion of DH 74 and Concurrent Enrollment in DH 80 and Concurrent Enrollment in DH 71D ( or DH 82)

**Recommended Preparation:****Limits on Enrollment:****Schedule of Classes Information:**

Description: Fundamental foundations for periodontal assessment and scope of therapy by the dental hygienist. In depth understanding of the biological, immunological, clinical and

behavioral aspects of the periodontal patient. A review of the anatomical features of the healthy periodontium, the etiology, epidemiology and risk factors of periodontal diseases, the rationale for therapy, critical analysis of patient assessments, current theories of treatment and specific rationales for mechanical and chemotherapeutic techniques. (Grade Only)

Prerequisites/Corequisites: Course Completion of DH 74 and Concurrent Enrollment in DH 80 and Concurrent Enrollment in DH 71D ( or DH 82)

Recommended:

Limits on Enrollment:

Transfer Credit: CSU;

Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>	Effective:	Inactive:
<b>CSU GE:</b>	<b>Transfer Area</b>	Effective:	Inactive:
<b>IGETC:</b>	<b>Transfer Area</b>	Effective:	Inactive:
<b>CSU Transfer:</b>	Transferable	Effective: Fall 1999	Inactive:
<b>UC Transfer:</b>		Effective:	Inactive:

**CID:**

**Certificate/Major Applicable:**

Major Applicable Course

## **COURSE CONTENT**

### **Outcomes and Objectives:**

#### **A. Periodontal Health**

1. Describe the healthy periodontium with regard to its anatomy, histology, and function.
2. Identify the clinical, histological, and radiographic features of the healthy periodontium.
3. Explain the histology of the gingival sulcus including epithelium, connective tissue, cementum, and bone.
4. Discuss the anatomy, physiology, and histology of oral mucosa.

#### **B. Disease Process**

1. Differentiate among the clinical, radiographic, and histologic features of the periodontal diseases and outline an acceptable system for their classification.
2. Utilize clinical assessment tools to evaluate, diagnose, and classify the periodontal diseases
3. Differentiate among infection and inflammation and explain how each contribute to periodontal bone loss.
4. Compare and contrast prevailing theories about periodontal disease progression in each of the known periodontal diseases, including the mechanism of bone resorption.
5. Apply prevailing theories to periodontal assessment and treatment.

#### **C. Epidemiology and Risk Factors**

1. Explain the epidemiology of the periodontal diseases and discuss potential problems with

data collection for epidemiological research.

2. Identify risk factors contributing to periodontal disease.  
income, place or residence and geographic area, oral hygiene, nutrition.
3. Utilize knowledge of clinical indices used in epidemiological trials and clinical practice.

#### D. Etiological Factors:

1. Describe the etiology of periodontal diseases, and be able to compare and contrast non specific plaque and specific plaque hypotheses.
2. Classify specific microorganisms associated with the periodontal diseases.
3. Discuss the role of diet in the formation of microbial plaque.
4. Describe the formation, composition and modes of attachment of calculus.

#### E. Dental Hygiene Assessment and Diagnosis

1. Discuss how aspects of periodontal disease causation theories affect diagnosis and therapy.
2. Perform a complete periodontal exam including appropriate chart documentation using recognized classification systems and clinical indices.
3. Interpret the severity of adult onset periodontitis as presented by the American Academy of Periodontology (AAP).

#### F. Periodontal Therapy

1. Explain the purpose of periodontal therapy.
2. Describe the rationale for periodontal resective and regenerative therapies from a histological and clinical point of view.
3. Discuss the rationale for patient care plan and re-evaluation to determine need for advanced periodontal treatment.
4. Describe the rationale for the initial phases of therapy and explain the procedures inherent in such therapy.
5. Discuss probable prognoses of the periodontal diseases gingivitis and adult onset periodontitis.
6. Explain and discuss pharmacological and adjunctive aspects of periodontal therapy.
7. Describe advanced diagnostic tools which can be used to modify treatment plans in advanced and refractory patients.

### **Topics and Scope:**

A. The ideal periodontium (1 Hr)

B. Epidemiology and risk factors (4 Hr)

C. Etiology of the periodontal diseases (6 Hrs)

1. Plaque colonization and maturation
  2. The microbiology of the periodontal diseases
  3. Supporting theories - Koch's postulates, Specificity theory, mixed bacterial infection theory
  4. Contributing factors
    - a. The formation, composition and modes of attachment of supra and subgingival calculus and the role of carious lesions in etiologic development of the periodontal diseases
    - b. Trauma from occlusion/orthodontic movement
  5. Predisposing factors eg. tobacco, age, sex, diet, oral hygiene
  6. Periodontal restorative interactions
- D. Disease progression: initial, early and established lesions of gingivitis, epithelial attachment loss, morphology of osseous

- bone loss (3hrs)
- E. Host response/the inflammatory response (2 Hrs)
  - 1. Histological response
  - 2. Vascular and cellular response
  - 3. Immunology response
- F. Pathogenesis/disease activity (2 Hrs)
- G. Traditional diagnostic tools/periodontal assessment (2 Hrs)
- H. Classification of the periodontal diseases/periodontal indic (4 Hrs)
- I. Radiographic interpretation of periodontal conditions (2 Hrs)
- J. Dental hygiene diagnosis and prognosis (3 Hrs)
- K. Treatment (2 Hrs)
  - 1. Aims/biologic rationale/overview of therapeutic modalities/sequencing
  - 2. Prevention
  - 3. Initial Therapy root planning/periodontal maintenance/oral prophylaxis
  - 4. Efficacy of initial therapy
  - 5. Decision making
  - 6. Adjunct therapy
- L. Follow-up case/referral (1 Hrs)
- M. Periodontic/prosthodontic considerations (2 Hrs)

### Assignment:

1. Completion of reading assignments (50-70 pages/week)
2. Semester-long case study:
  - a. Initial clinical charting and medical history
  - b. Production and interpretation of full mouth radiographs
  - c. Study models and photographs of clinical patient
  - d. Identification of patient's risk factors and prognosis for successful resolution of disease through clinical therapy
  - e. Internet/outside resource documentation
3. Group oral presentation and seminar discussion of selected clinic patients above in groups of 4 students
4. Exams: midterm, final

### Methods of Evaluation/Basis of Grade:

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Written case study	Writing 10 - 15%
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**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Preparation and presentation of case study	Problem solving 15 - 30%
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**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None

Skill Demonstrations  
0 - 0%

**Exams:** All forms of formal testing, other than skill performance exams.

Multiple choice, True/false, Matching items: midterm and final exam

Exams  
45 - 60%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

Class participation--contribution and questions demonstrating critical thinking

Other Category  
5 - 10%

**Representative Textbooks and Materials:**

Clinical Periodontology, Carranza and Newman; W.B. Saunders, 10th ed., 2006

**SUPPLEMENTAL TEXTS:**

Clinical Practice of the Dental Hygienist, Wilkins Lea and Feibiger, current edition

Comprehensive Periodontics for the Dental Hygienist, Weinberg, Westphal, Palat, and Froum; Prentice Hall, current edition