

**Virginia Western Community College**  
**DNH 145**  
**General and Oral Pathology**

**Prerequisites**

DNH 115

**Course Description**

Introduces general pathology with consideration of the common diseases affecting the human body. Particular emphasis is given to the study of pathological conditions of the mouth, teeth, and their supporting structures.

**Semester Credits: 2   Lecture Hours: 2****Required Materials****Textbooks:**

Ibsen, Olga A.C., and Phelan, Joan Andersen, *Oral Pathology for the Dental Hygienist*. (8th Edition). Elsevier Saunders, ISBN 978-0323764032.

Wilkins, Esther M., *Clinical Practice of the Dental Hygienist* (14<sup>th</sup> edition). Jones and Bartlett, ISBN: 978- 1284255997.

**Course Outcomes**

At the completion of this course, the student should be able to:

1. Recall the histological basis of the structures of the oral cavity and apply this knowledge when identifying disease entities.
2. Apply previously and concurrently acquired knowledge of human anatomy, radiology, and periodontics to this course to facilitate understanding of concepts presented.

3. Perform thorough assessment of pathologic conditions seen in your clinical caseload to assist in determining a differential diagnosis.
4. Correlate signs and symptoms of oral abnormalities with etiologic factors.
5. With guidance, determine the need for referral of pathological conditions and make the appropriate referral.
6. Use the knowledge from this course to conduct clear and tactful discussions of clinical manifestations of disease with clinic patients, faculty, dentists and other professionals as appropriate.
7. Apply your knowledge from this course to concurrent and subsequent courses in the curriculum.

## **Topic Description:**

### **I. Introduction to Preliminary Diagnosis of Oral Lesions - WEEK 1**

- a. Clinical Appearance of Soft Tissue Lesions
- b. Radiographic Terms to Describe Lesions in Bone
- c. The Diagnostic Process
- d. Variants of Normal
- e. Benign Conditions of Unknown Causes

### **II. Inflammation and Repair - WEEKS 2 & 3**

- a. Injury
- b. Natural Defenses against Injury
- c. Inflammation
- d. Regeneration and Repair
- e. Injuries to Teeth
- f. Injuries to Oral Soft Tissues
- g. Reactive Connective Tissue Hyperplasia
- h. Inflammatory Periapical Lesions

### **III. Immunity - WEEK 5**

- a. The Acquired Immune Response
- b. Antigens
- c. Cellular Involvement in the Immune Response
- d. Major Divisions of the Immune Response
- e. Memory and Immunity
- f. Types of Immunity
- g. Immunopathology
- h. Oral Diseases with Immunologic Pathogenesis
- i. Autoimmune Diseases that Affect the Oral Cavity

### **V. Infectious Diseases - WEEK 6**

- a. Bacterial Infections
- b. Fungal Infections
- c. Viral Infections

### **VI. Neoplasia - WEEKS 8 & 10**

- a. Description of Neoplasia
- b. Causes of Neoplasia
- c. Classification of Tumors
- d. Names of Tumors
- e. Treatment of Tumors
- f. Epithelial Tumors
- g. Tumors of Squamous Epithelium
- h. Salivary Gland Tumors
- i. Odontogenic Tumors
- j. Tumors of Soft Tissue
- k. Tumors of Melanin-Producing Cells
- l. Tumors of Blood-Forming Tissue
- m. Metastatic Tumors of the Jaws

## **VII. Non-Neoplastic Diseases of Bone - WEEK 11**

- a. Benign Fibro-Osseous Lesions
- b. Paget Disease of Bone
- c. Central Giant Cell Granuloma
- d. Osteomalacia

## **VIII. Developmental Disorders - WEEKS 13**

- a. Embryonic Development of the Face, Oral Cavity, and Teeth
- b. Developmental Soft Tissue Abnormalities
- c. Developmental Cysts
- d. Developmental Abnormalities of the Teeth

## **IX. Genetics - WEEKS 14 & 15**

- a. Chromosomes
- b. Normal Cell Division
- c. Molecular Composition of Chromosomes
- d. Inheritance Patterns
- e. Lyon Hypothesis
- f. Syndromes
- g. Inherited Dermatologic and Mucosal Disorders
- h. Inherited Disorders of the Gingiva and Periodontium
- i. Inherited Disorders Affecting the Dentition

## **X. Oral Manifestations of Systemic Diseases – WEEKS 14 and 15**

- a. Gigantism and acromegaly
- b. Hyperthyroidism and hypothyroidism
- c. Diabetes
- d. Addison Disease and Cushing Syndrome
- e. Blood disorders
- f. Celiac Disease
- g. Blood tests
- h. Chemotherapy/radiation therapy
- i. Gingival enlargement drugs
- j. Medication-related osteonecrosis of the jaw (MRONJ)

## **XI. Orofacial Pain and Temporomandibular Disorders – WEEKS 14 and 15**

- a. Neuropathic pain
- b. Burning Mouth Syndrome
- c. Trigeminal Neuralgia
- d. Bell Palsy
- e. Temporomandibular joint anatomy
- f. Muscles of Mastication
- g. Temporomandibular disorders (TMD)
- h. Orofacial Pain other than TMD