# El Paso Community College
# Syllabus
# Part II
# Official Course Description

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| **SUBJECT AREA** | **Dental Hygiene** |
| **COURSE RUBIC AND NUMBER** | **DHYG 1239** |
| **COURSE TITLE** | **General and Oral Pathology** |
| **COURSE CREDIT HOURS** | **2 2 : 1**<br>**Credits Lec Lab** |

## I. Catalog Description

Studies disturbances in human body development, diseases of the body, and disease prevention measures with emphasis on the oral cavity and associated structures. A grade of "C" or better is required in this course to take the next course. **Prerequisite: DHYG 1301. (2:1). Lab fee.**

## II. Course Objectives

Upon satisfactory completion of the course, the student will be able to:

A. Introduction to Preliminary Diagnosis of Oral Lesions

1. Define each of the terms in the vocabulary list for this chapter.
2. List and define the eight diagnostic categories that contribute to the diagnostic process.
3. Name a diagnostic category and give an example of a lesion, anomaly, or condition for which this category contributes greatly to the diagnosis.
4. Describe the clinical appearance of Fordyce=s granules (spots), torus palatinus, mandibular tori, and lingual varicosities, and identify them on a slide.
5. Describe the radiographic picture and historical data (including the age, sex, and race of the patient) that are relevant to periapical cementl dysplasia (cementoma).
6. Define Avariant of normal@ and give three examples of such lesions involving the tongue.
7. List and describe the clinical characteristics and identify a clinical picture of fissured tongue, median rhomboid glossitis, geographic tongue, ectopic geographic tongue, and hairy tongue.
8. Describe the clinical and histologic differences between leukoedema and linea alba.

B. Inflammation and Repair

1. Define each of the words in the vocabulary list for this chapter.(Organizing and maintaining information)
2. List the five classic signs of inflammation that are visible at the site of inflammation.
3. List three systemic signs of inflammation.
4 Describe the microscopic events that are associated with each of the Classic signs of inflammation.
5. List and describe the microscopic events of the inflammatory process.
6. List the types of white blood cells that participate in inflammation and describe how each is involved.
7. Describe the differences between acute and chronic inflammation.

8. Define and contrast hyperplasia and hypertrophy.
9. Describe the microscopic events that occur during the repair of a mucosal wound.
10. Describe and contrast healing by primary intention, healing by secondary intention, and healing by tertiary intention.
11. Describe and contrast attrition, abrasion, and erosion.
12. Describe the pattern of erosion seen in bulimia.
13. Describe the relationship between bruxism and abrasion.
14. Describe the cause, clinical features, and treatment of each of the following:

    Aspirin and phenol burns
    Electric burn
    Traumatic ulcer
    Frictional keratosis
    Linea alba
    Nicotine stomatitis

15. Describe the clinical features, cause (when known), treatment, and histologic appearance of each of the following:

    Traumatic neuroma
    Postinflammatory melanosis
    Solar cheilitis
    Mucocele
    Ranula
    Necrotizing sialometaplasia
    Pyogenic granulosa
    Giant cell granuloma
    Chronic hyperplastic pulpitis
    Irritation fibroma

16. Describe the difference between a mucocele and a ranula.
17. Define sialolithiasis.
18. Describe the difference between acute and chronic sialadenitis.
19. Describe the clinical features, radiographic appearance, and histologic appearance of a periapical abscess, a periapical granuloma, and a periapical (radicular) cyst.
20. Describe and contrast internal and external tooth resorption.

C. Immunity

1. Define each of the words in the vocabulary list for this chapter.
2. Describe the primary difference between the immune response and the inflammatory response.
3. List the two main types of lymphocytes and their origins.
4. List three activities of macrophages.
5. Describe, using the cells involved, the difference between the humoral immune response and the cell-mediated immune response.
6. Describe the difference between active and passive immunity.
7. Give one example of active immunity, and give one example of passive immunity.
8. List and describe four types of hypersensitivity reactions, and give an example of each.
9. Define autoimmunity, and describe how it results in disease.
10. Define immunodeficiency, and describe how it results in disease.
11. Describe and contrast the clinical features of each of the three types of aphthous ulcers.
12. List three systemic diseases associated with aphthous ulcers.
13. Describe and compare the clinical features of urticaria, angioedema, contact mucositis, fixed drug eruption, and erythema multiforme.

14. Describe the clinical and histologic features of lichen planus.
15. List and triad of systemic signs that compose Reiter's syndrome, and describe the oral lesions that occur in this syndrome.
16. Name the two cells that histologically characterize Langerhans cell disease. Describe the acute disseminated for , chronic disseminated form, and the chronic localized form and state the names that have traditionally been used for each of these conditions.
17. Describe the oral manifestations of each of the following autoimmune diseases:
    Sjögren=s syndrome.
    Lupus erythematosus
    Pemphigus vulgaris
    Cicatricial pemphigoid
    Behcet=s syndrome
18. Describe the clinical features of desquamative gingivitis, and list three diseases in which it may occur.
19. Describe the components of Behcet's syndrome.
20. Describe how infection occurs and the factors involved.
21. Describe the mechanism that allows opportunistic infection to develop.
22. For each of the following infectious diseases, name the organism causing it; list the route or routes of transmission of the organism and the oral manifestations of the disease; and describe how the diagnosis is made:

    Tuberculosis
    Actinomycosis
    Syphilis (primary, secondary, tertiary)
    Verruca vulgaris
    Condyloma acuminatum
    Primary herpetic gingivostomatitis

23. List and describe four forms of oral candidiasis.
24. List two examples of opportunistic infections, that can occur in the oral cavity.
25. Describe the clinical features of herpes labialis.
26. Describe the spectrum of HIV disease, including initial infection and the development of AIDS.
27. List five oral manifestations of HIV infection.
28. Describe the oral problems that would be expected to occur in a patient with radiation-induced xerostomia.
29. List two drugs that have been associated with gingival enlargement.

D. Developmental Disorders

1. Define each of the words in the vocabulary list for this chapter.
2. Define inherited disorders.
3. Recognize developmental disorders of the dentition.
4. Describe the embryonic development of the face, oral cavity, and teeth.
5. Define, describe, and identify all the developmental anomalies discussed in this chapter.
6. Identify clinically, radiographically, or both, the developmental anomalies discussed in this chapter.
7. Distinguish between intraosseous cysts and extraosseous cysts.
8. Describe the differences between odontogenic and nonodontogenic cysts.
9. Name four odontogenic cysts that are intraosseous.
10. Name two odontogenic cysts that are extraosseous.
11. Name four nonodontogenic cysts that are introsseous.
12. Name four nonodontogenic cysts that are extraosseous.
13. List and define three anomalies that affect the number of teeth.
14. List and define two anomalies that affect the size of the teeth.
15. List and define five anomalies that affect the shape of the teeth.

16. Identify anomalies affecting tooth eruption.
17. Identify the diagnostic process that contributes most significantly to the final diagnosis of each developmental anomaly discussed in this chapter.

E. Neoplasia

1. Define each of the words in the vocabulary list for this chapter.
2. Explain the difference between a benign tumor and a malignant tumor.
3. Define leukoplakia and erythroplakia.
4. Define the neoplasms listed below.
5. Describe the clinical features of each neoplasm listed below.
6. Explain the usual treatment for each neoplasm listed below.

Papilloma
Squamous cell carcinoma
Verrucous carcinoma
Basal cell carcinoma
Pleomorphic adenoma
Monomorphic adenoma
Adenoid cystic carcinoma
Mucoepidermoid carcinoma
Ameloblastoma
Calcifying epithelial odontogenic tumor
Cementifying and ossifying fibromas
Benign cementoblastoma
Periapical cemento-oseous dysplasia
Focal cemento-oseous dysplasia
Florid cemento-osseous dysplasia
Ameloblastic fibroma
Adenomatoid odontogenic tumor
Calcifying odontogenic cyst
Odontoma
Peripheral ossifying fibroma
Lipoma
Neurofibroma and schwannoma
Granular cell tumor
Congenital epulis
Rhabdomyosarcoma
Hemangioma
Lymphangioma
Kaposi's sarcoma
Melanocytic nevi
Malignant melanoma
Torus
Exostosis
Osteoma
Osteosarcoma
Chondrosarcoma
Leukemia
Lymphoma
Multiple myeloma
Metastatic jaw tumors

F. Genetics

1. Define each of the words listed in the vocabulary for this chapter.
2. State the purpose of mitosis.

3. State the purpose of meiosis.
4. Explain what is meant by the Lyon hypothesis, and give example of its clinical significance.
5. Explain what is meant by a gross chromosomal abnormality, and give three examples of syndromes that result from gross chromosomal abnormalities.
6. List the four inheritance patterns.
7. Explain what is meant by X-linked inheritance.
8. State the inheritance pattern, and describe the oral manifestations and, if appropriate, the characteristic facies for each of the following:
   Cyclic neutropenia
   Papilon-LefŠvre syndrome
   Cherubism
   Chondroectodermal dysplasia (Ellis-van Creveld syndrome)
   Mandibulofacial dysostosis (Treacher Collins syndrome)
   Osteogenesis imperfecta
   Hereditary hemorrhagic telangiectasia (Osler-Rendu-Parkes Weber syndrome)
   Peutz-Jeghers syndrome
   White spongy nevus (Cannon's disease)
   Hypohidrotic ectodermal dysplasia
   Hypophosphatasia
   Hypophosphatemic vitamin D-resistant rickets

9. State the inheritance pattern, the oral or facial manifestations, and the type and location of the malignancy associated with each of the following syndromes:
   Gardner's syndrome
   Nevoid basal cell carcinoma syndrome (Gorlin's syndrome)
   Multiple mucosal neuromas, medullary carcinoma of the thyroid gland, and pheochromocytoma syndrome (MEN 2B)
   Neurofibromatosis of von Recklinghausen
10. Intestinal polyps are a component of both Peutz-Jeghers syndrome and Gardner's syndrome. State the location and malignant potential of the intestinal polyps in each of these syndromes.
11. List the four types of amelogenesis imperfecta.
12. Briefly compare and contrast dentinogenesis imperfecta, amelogenesis imperfecta, and dentin dysplasia, including the inheritance patterns and the clinical manifestations and radiographic appearance of each.

G. Oral Manifestations of Systemic Disease

1. Define each of the words in the vocabulary list for this chapter.
2. Describe the difference between gigantism and acromegaly, and describe the physical characteristics of each.
3. State the oral manifestations of hyperthyroidism.
4. Describe the difference between primary and secondary hyperparathyroidism.
5. Define diabetes mellitus, and describe the oral manifestations.
6. List the major clinical characteristics of type I and type II diabetes.
7. Define Addison's disease, and describe the changes that occur on the skin and oral mucosa in a patient with Addison's disease.
8. Compare and contrast monostotic fibrous dysplasia with polyostotic fibrous dysplasia.
9. Compare and contrast the radiographic appearance, histologic appearance, and treatment of fibrous dysplasia of the jaws with those of ossifying fibroma of the jaws.
10. Compare and contrast the three types of polyostotic fibrous dysplasia.
11. Describe the histologic appearance of Paget's disease of bone, and describe its clinical and radiographic appearance when the maxilla or mandible is involved.
12. State the cause of osteomalacia and rickets.

13. Compare and contrast the cause, laboratory findings, and oral manifestations of each of the following: iron deficiency anemia, pernicious anemia, folic acid deficiency, and vitamin B12 deficiency.
14. Compare and contrast the definitions and oral manifestations of thalassemia and sickle cell anemia.
15. Define celiac sprue.
16. Describe the difference between primary and secondary aplastic anemia.
17. Describe the oral manifestations of polycythemia.
18. Explain why platelets may be deficient in polycythemia vera.
19. Describe the most characteristic oral manifestations of agranulocytosis.
20. Describe and contrast acute and chronic leukemia.
21. State the purpose of each of the following laboratory tests: platelet count, bleeding time, prothrombin time, partial thromboplastin time.
22. List two causes of thrombocytopenic purpura.
23. Describe the oral manifestations of thrombocytopenia and nonthrombocytopenic purpura.
24. Define hemophilia, and describe its oral manifestations and treatment.
25. Describe the difference between primary and secondary immunodeficiency.
26. Describe the spectrum of HIV disease, including initial infection and the development of AIDS.
27. List five oral manifestations of HIV infection.
28. Describe the oral problems that would be expected to occur in a patient with radiation-induced xerostomia.
29. List two drugs that have been associated with gingival enlargement.

H. Temporomandibular Disorders and Dental Implants

1. Label the following on a diagram of the temporomandibular joint:

   Glenoid fossa of the temporal bone
   Articular disc
   Mandibular condyle
   Joint capsule
   Superior belly of the lateral pterygoid muscle.

2. State the function of the muscles of mastication.
3. State two symptoms of a temporomandibular disorder.
4. List at least two problems that are suggestive of temporomandibular dysfunction.
5. State the function of radiographs in the evaluation of a patient with symptoms suggestive of temporomandibular dysfunction.
6. List and describe the two main categories of treatment of temporomandibular disorders.
7. Describe what is meant by the term osseointegration.
8. State the most important clinical parameter used to assess implant health.
9. List four signs of peri-implant disease.
10. Describe the radiographic finding indicative of a failing implant.
11. Explain why plastic instruments are used to remove plaque and debris from the implant-tissue interface.
12. List two causes of implant failure.
13. Describe the role that a dental hygienist might play in the management of a patient with dental implants.

## III. THECB Learning Outcomes (WECM)

1. Differentiate between normal and abnormal conditions of the human body with emphasis on the oral cavity.
2. Identify the major principles for disease prevention.

## IV. Evaluations

A. Examinations

A total of five examinations will be given during the semester. Each one will be comprehensive. (The final exam being the last of the five). Each exam will represent 1/5 of the grade. There will be no makeup for a missed exam.

Total 100

B. Grading Scale

A = 93 - 100
B = 83 - 92
C = 75 - 82
F = Below 75

In the event the grade is borderline, class attendance and participation will be considered in the final grade computation. NOTE TO THE STUDENTS: A grade of "C" or better is required in order to meet the standards for Dental Hygiene.

NOTE TO THE STUDENTS: A grade of AC@ or better is required in order to meet the standards for Dental Hygiene.

C. Attendance - Drops

It is the student's responsibility to attend class as per the schedule. It is also the student's responsibility to withdraw from the course for whatever reason. The instructor assumes no responsibility for student withdrawal from the course or for the completion of student=s course work. Course expectations are outlined in this syllabus.

## V. Disability Statement (American with/Disabilities Act [ADA])

EPCC offers a variety of services to persons with documented sensory, mental, physical, or temporary disabling conditions to promote success in classes. If you have a disability and believe you may need services, you are encouraged to contact the Center for Students with Disabilities to discuss your needs with a counselor. All discussions and documentation are kept confidential. Offices located: VV Rm C-112 (831-2426); TM Rm 1400 (831-5808); RG Rm B-201 (831-4198); NWC Rm M-54 (831-8815); and MDP Rm A-125 (831-7024).

## VI. 6 Drop Rule

Students who began attending Texas public institutions of higher education for the first time during the Fall 2007 semester or later are subject to a 6-Drop limit for all undergraduate classes. Developmental, ESL, Dual Credit and Early College High School classes are exempt from this rule. All students should consult with their instructor before dropping a class. Academic assistance is available. Students are encouraged to see Counseling Services if dropping because exemptions may apply. Refer to the EPCC catalog and website for additional information.