I. **DH 154:** ORAL PATHOLOGY  

II. **PREPARED BY:** JOY OGAMI AVILA, R.D.H., M.S.  

III. **REVISED FOR:** SPRING 2014  

IV. **PREREQUISITES:** COMPLETION OF ALL PREREQUISITE DENTAL HYGIENE COURSES WITH A FINAL GRADE OF "C" OR BETTER.  

V. **UNITS AND HOURS:** LECTURE 2 HOURS, 2 UNITS  
   WEDNESDAYS, 8:00AM – 10:20AM  

VI. **COURSE DIRECTOR:** JOY OGAMI AVILA, RDH, M.S.  
   OFFICE HOURS: WEDNESDAYS 10:30 AM - 12:00PM and via appointment  
   CONTACT: jcogami@gmail.com  

VII. **COURSE DESCRIPTION:**  
   Introduction to the interpretation of clinical and histological pathologic conditions with emphasis on clinical signs and symptoms.  

VIII. **REQUIRED TEXT:**  

IX. **SUGGESTED REFERENCES:**  

X. **INSTITUTIONAL STUDENT LEARNING OBJECTIVES:**  
   A. **Critical Thinking:** Analyze problems by differentiating fact from opinions, using evidence, and using sound reasoning to specify multiple solutions and their consequences.  
      **Assessment:** The student will work through patient scenarios to develop a differential diagnosis that integrates the oral pathology concepts to patient care.
B. **Communication:** Effectively communicate thought in a clear, well-organized manner to persuade, inform, and convey ideas in academic, work, family, and community settings.  
**Assessment:** The student will communicate thoughts to peers during class discussions, to instructors and patients in clinic, and will communicate a review of the evidence in a scientific paper.

**DENTAL HYGIENE PROGRAM OUTCOMES:**

The student is expected to possess knowledge, skills, judgments, values, and attitudes to develop the foundation for the listed program competencies.

#1: Adhere to the American Dental Hygienist’s Associations’ code of ethical conduct and apply this code to established state and federal laws, recommendations, regulations in the provision of dental hygiene care.

#2: Perform self-assessment for life-long learning to provide evidenced-based practice of dental hygiene.

#3: Understand and interpret the scientific literature and research as it relates to the evidence-based practice of dental hygiene.

#4: Utilize current technology to enhance education, patient care, research and professional growth.

#7: Provide the values of oral health, general health and wellness in individuals and populations with identified risk factors and develop strategies that promote health related quality of life.

#8: Systematically collect, analyze and record assessment data on the general, oral, periodontal, and psychosocial health status of the child, adolescent, adult, geriatric and special populations using methods consistent with medico-legal principles.

8.1 Obtain, review and update a complete medical, family, social, and dental history  
8.2 Obtain consultation as indicated  
8.3 Assess predisposing and etiologic risk factors

#11: Recognize and provide the appropriate care for a medical emergency that occurs in the dental setting.

11.1 Identify patients at risk for a medical emergency

**COURSE OBJECTIVES:**

At the end of this course, the student will be able to perform an oral examination on all clinic patients to identify and interpret all deviations from normal. With the aid of the
instructor, the student will be able to interpret any oral pathology and take the proper

course of action to obtain a definitive diagnosis.

COURSE CONTENT:

1. Introduction to the Diagnostic Process
2. Variants of Normal
3. Benign Conditions of Unknown Causes
4. Injuries to Teeth and Oral Soft Tissues
5. Reactive Connective Tissue Hyperplasia and Inflammatory Periapical Lesions
6. Oral Diseases with Immunologic Pathogenesis
7. Autoimmune Diseases that Affect the Oral Cavity
8. Infectious Diseases
9. Developmental Soft Tissue Abnormalities and Developmental Cysts
10. Genetics
11. Neoplasias of the Oral Cavity
12. Non-neoplastic Diseases of Bone
13. Oral Manifestations of Systemic Diseases and Cancer Therapy
14. Oral Biopsies and Oral Pathology Reports

Through knowledge gained in lectures and reading assignments, the students will be able to
distinguish the following conditions on written examinations including slide identification:

Describe the preliminary steps involved in the diagnosis of oral lesions.
1. Describe how to perform a systematic approach to differential diagnosis.
2. Describe the different diagnostic evaluations that can be incorporated into a
differential diagnosis.

Describe and identify the variants of normal, benign conditions, and the response to oral
injuries.
3. Identify and describe the variants of normal including fordyce granules, torus
palatinus, mandibular tori, melanin pigmentation, retrocuspid papilla, lingual varicosities,
linea alba, and leukoedema.
4. Identify and describe different benign conditions of the tongue with unknown
causes including lingual thyroid nodule, fissured tongue, median rhomboid glossitis,
geographic tongue, and hairy tongue.
5. Identify and give the etiology to each of the following: attrition, abrasion,
abfraction, erosion, aspirin burn, phenol burn, electric burn, self-induced injuries, lesions
associated with cocaine use, hematoma, traumatic ulcer, frictional keratosis, linea alba,
nicotine stomatitis, tobacco pouch keratosis, traumatic neuroma, amalgam tattoo,
melanosis, solar cheilitis, mucocele, necrotizing sialometaplasia, sialolith, and sialadenitis.
6. Review slides and give a differential diagnosis for injuries to teeth and oral soft
tissues.
7. Describe the tissue reaction that occurs from tobacco.
8. Identify, describe, and give the etiology of the following: pyogenic granuloma,
giant cell granuloma, irritation fibroma, denture-induced fibrous hyperplasia, papillary
hyperplasia of the palate, gingival enlargement, chronic hyperplastic pulpitis, periapical
abscess, periapical granuloma, radicular cyst, resorption of teeth, focal sclerosing osteomyelitis, and alveolar osteitis.

9. Differentiate between different connective tissue hyperplastic lesions and inflammatory periapical lesions.
10. List clinical and radiographic characteristics of connective tissue hyperplastic lesions and inflammatory periapical lesions.

Describe and identify oral diseases with immunologic pathogenesis and associated or non-associated infectious diseases.

11. Identify, describe and state the etiology of aphthous ulcers, urticaria, angioedema, contact mucositis and dermatitis, fixed drug eruptions, erythema multiforme, lichen planus, Reiter syndrome, and Langerhans cell disease.
12. Differentiate between the different oral diseases with immunologic pathogenesis.
13. Recognize and state the clinical symptoms of Sjögren syndrome, systemic lupus erythematosus, pemphigus vulgaris, cicatrical pemphigoid, bullous pemphigoid, and Behcet syndrome.
14. Compare and contrast between the different autoimmune diseases that affect the oral cavity with emphasis on their oral manifestations.
15. Give the treatment and prognosis of the different autoimmune diseases that affect the oral cavity.
16. State treatment planning modifications needed to treat patients with autoimmune diseases.
17. Describe the etiology, disease process, clinical manifestations and treatment planning modification for bacterial, fungal, and viral infectious diseases.
18. Describe the diagnosis and treatment for bacterial, fungal, and viral infectious diseases.
20. State treatment planning modifications needed to treat patients with specific infectious diseases.

Describe and identify developmental disorders and genetic conditions with oral effects.

21. Recognize and describe the etiology of the following developmental soft tissue abnormalities: ankyloglossia, commissural lip pits, and lingual thyroid.
22. Describe how developmental cyst form and state their origin.
23. Describe and differentiate between the different odontogenic and nonodontogenic developmental cysts.
24. Identify and describe each of the odontogenic and nonodontogenic developmental cysts.
25. State the clinical manifestations and radiographic characteristics of the different odontogenic and nonodontogenic developmental cysts.
26. Describe and identify clinical syndromes resulting from gross chromosomal abnormalities.
27. Describe the patterns of inheritance as follows: autosomal dominant, autosomal recessive, and X-linked.
28. Recognize and describe the etiology of inherited disorders affecting the gingiva, periodontium, jaw bones, facies, and oral mucosa including the following: cyclic neutropenia, Papillon-Lefèvre syndrome, gingival fibromatosis, cherubism, chondroectodermal dysplasia, cleidocranial dysplasia, Gardner syndrome, mandibulofacial
dysostosis, nevoid basal cell carcinoma syndrome, osteogenesis imperfecta, torus mandibularis, torus palatinus, maxillary exostosis, cleft palate, cleft lip, hereditary hemorrhagic telangiectasia, multiple mucosal neuroma syndrome, neurofibromatosis of von Recklinghausen, Peutz-Jeghers syndrome, and white sponge nevus.

29. Describe the clinical manifestations, treatment, and prognosis for inherited disorders.
30. State treatment planning modifications needed to treat patients with inherited disorders.

Describe and identify oral neoplasias and non-neoplastic diseases.

31. State and describe the classification of neoplastic tumors.
32. Identify and differentiate between different neoplastic tumors.
33. Describe the clinical manifestations and histological characteristics of epithelial tumors and squamous epithelium tumors.
34. Compare and contrast between pleomorphic adenoma, monomorphic adenoma, adenoid cystic carcinoma, and mucoepidermoid carcinoma.
35. State the clinical manifestations and treatment of the different salivary gland tumors.
36. Identify and classify odontogenic tumors according to their origin.
37. Compare and contrast between the different odontogenic tumors.
38. Describe the clinical manifestations and radiographic characteristics of the different odontogenic tumors.
39. Discuss the treatment and recurrence of the different odontogenic tumors.
40. Identify and compare lipoma, tumors of nerve tissue, tumors of muscle, and vascular tumors.
41. Discuss the etiology of soft tissue tumors.
42. Identify and describe melanocytic nevi and malignant melanoma.
43. State the etiology, treatment, and prognosis of melanin-producing tumors.
44. Identify and describe torus, exostosis, osteoma, osteosarcoma, and tumors of cartilage.
45. Describe the clinical manifestation and radiographic characteristics of tumors of bone and cartilage.
46. State the etiology and treatment for tumors of bone and cartilage.
47. Describe and differentiate between leukemia, lymphoma, and multiple myeloma.
48. Describe the clinical manifestations, treatment, and prognosis of leukemia, lymphoma, and multiple myeloma.
49. State treatment planning modifications needed to treat patients with leukemia, lymphoma, and multiple myeloma.
50. Discuss the metastatic tumors of the jaws.
51. Describe and differentiate between nonneoplastic diseases of bone including periapical cemento-osseous dysplasia, focal cemento-osseous dysplasia, florid cemento-osseous dysplasia, fibrous dysplasia, Paget disease of bone, and osteomalacia.
52. Discuss the clinical and radiographic manifestations and treatment planning modifications of nonneoplastic diseases of bone.

Describe and identify the oral manifestations of systemic diseases and cancer therapy.
53. Describe and differentiate between endocrine diseases including hyperpituitarism, hyperthyroidism, hypothyroidism, hyperparathyroidism, diabetes mellitus, and Addison disease.

54. Describe the clinical manifestations and treatment of hyperpituitarism, hyperthyroidism, hypothyroidism, hyperparathyroidism, diabetes mellitus, and Addison disease.

55. Discuss treatment planning modifications needed to treat patients with hyperpituitarism, hyperthyroidism, hypothyroidism, hyperparathyroidism, diabetes mellitus, and Addison disease.

56. Describe and differentiate between blood disorders including anemia, polycythemia, agranulocytosis, and leukemia.

57. Describe the clinical manifestations and treatment of anemia, polycythemia, agranulocytosis, and leukemia.

58. Discuss treatment planning modifications needed to treat patients with anemia, polycythemia, agranulocytosis, and leukemia.

59. Describe and differentiate between bleeding disorders.

60. Discuss treatment planning modifications needed for patients with bleeding disorders.

61. Discuss the disease process and clinical manifestations of HIV/AIDS.

62. Discuss treatment planning modifications needed to treat patients with HIV/AIDS.

63. Discuss and describe the clinical manifestations associated with radiation therapy and chemotherapy.

64. Discuss treatment planning modifications needed for patients undergoing radiation therapy and chemotherapy.

65. Describe and differentiate between various types of oral biopsies.

66. Discuss the indications for an oral biopsy.

67. Identify the parts of, and how to read a pathology report.

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<tr>
<th>Course SLO</th>
<th>Assessment Method</th>
<th>Criterion Level</th>
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<tbody>
<tr>
<td>1. Research and collaborate information in a paper that demonstrates comprehensive understanding of a specific topic.</td>
<td>Student written report will be evaluated using a grading rubric.</td>
<td>At least 80% of students will earn a minimum score of 75% on all components of the grading rubric.</td>
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<tr>
<td>2. Communicate thoughts to peers during class discussions, to instructors and patients in clinic, and will communicate a review of the evidence in an oral presentation.</td>
<td>Students will give an oral presentation that will be evaluated using a grading rubric.</td>
<td>At least 80% of students will earn a minimum score of 75% on all components of the grading rubric.</td>
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*Describe the steps involved in oral biopsies and how to read oral pathology reports.*
### Demonstrate an understanding of the pathogenesis of disease and how this relates to dental hygiene treatment options.

<table>
<thead>
<tr>
<th>Students will be given a series of examination questions that will be evaluated using a scantron scanner.</th>
<th>At least 80% of students will correctly answer a minimum of 75% of the examination questions.</th>
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</thead>
</table>

#### XI. METHODS OF INSTRUCTION:

Lectures, discussions, small group activities, and cooperative learning tasks will be used to implement this course. Students will have assigned reading that will be required outside of class.

#### XII. METHODS OF EVALUATION:

Total points possible = 500

1. Written Paper and Presentation 20%
2. Quizzes* (20 points each) 25%
3. Midterm Examination 25%
   - Passing grade of C or better is required**
4. Final Accumulative Written Examination 30%

#### GRADING INFORMATION:

- A = 90-100%
- B = 80-89%
- C = 70-79% (minimum requirement to pass the course is 70%)
- D = 60-69%

The Dental Hygiene curriculum is scheduled in a sequence of courses, given only once per year; therefore, all courses and pre-requisites must be completed with a minimum of a "C" grade in order to continue in the Dental Hygiene Program.

Students who receive less than a "C" grade at midterm in any course will be notified by the program director in writing of this status. It is the responsibility of the student to seek help and/or clarification of the deficiency with the course instructor. Please refer to the college catalog for further information on grading policies and procedures.

*Quizzes – Quizzes will be a combination of question types. Quizzes will be administered during the first 15 minutes of each class session where a quiz is scheduled. If a student arrives late, they can take the quiz with the remaining time. Once the time for the quiz is completed, all quizzes will be turned in. No makeup quizzes will be given. If a quiz is not taken, the student will receive zero (0) for that quiz.*
**Exams** – The Midterm Exam is a sectional exam, and the final exam is cumulative. All exams will be composed of a Part A – identification and a Part B – written exam of multiple choice and short answer questions. Students must receive a “C” or better on the midterm. If a student receives a grade less than a “C”, they will meet with the instructor and dental hygiene director to discuss a remediation plan. No retakes of the final examination will be given. If an exam is not taken, the student will receive a zero (0) for that exam.

**Spelling and Grammar** – Verbal and written communication is an important aspect of professionalism therefore, spelling and grammar errors cited by the course instructor on quizzes, exams, and the report will result in point deductions.

**Attendance** – All students are expected to be on time and attend all class sessions to be successful in this course. If absence from this course in unavoidable, call the allied health secretary at 310-287-4464 to leave a message regarding your absence. It is the student’s responsibility to check with the instructor via email regarding work missed and to check with classmates regarding class discussions and notes. Excessive missed classes or tardiness will be addressed by the instructor and will result in loss of points.

**Professionalism** – Students are expected to read ahead of class lectures to be prepared for each class. Additionally, cell phones may not be used for any reason during class.

XIII. COURSE CONTENT OUTLINE:

<table>
<thead>
<tr>
<th>Session/Date</th>
<th>Topic</th>
<th>Reading/Preparation</th>
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</table>
| Session #1 2/12/13 | • Introduction to Oral Pathology  
• Lesions that Look Like Vesicles | Chapter 11 |
| Session #2 2/19/13 | **Quiz #1**  
• Ulcers and Ulcer-like Lesions | Chapter 12 |
| Session #3 2/26/13 | • Lesions in Shades of Red and Purple  
**Outline for written and oral report due** | Chapter 13 |
| Session #4 3/5/13 | **Quiz #2**  
• White Lesions | Chapter 14 |
| 3/12/13 | • Pigmented Lesions | Chapter 15 |
| Session #5 3/19/12 | **Quiz #3**  
• Lesions with Surface Changes | Chapter 16 |
| Session #6 3/26/13 | **Midterm Exam** | |
| Session #7 4/2/13 | • Soft Tissue Enlargements | Chapter 17 |
| 4/9/13 | **No Class Spring Break** | |
| Session #8 4/16/13 | • Hard Tissue Enlargements | Chapter 18 |
### Session Schedule

<table>
<thead>
<tr>
<th>Session #9</th>
<th>Quiz #4</th>
<th>Chapter 19</th>
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<tbody>
<tr>
<td>4/23/13</td>
<td>Radiopaque Lesions</td>
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<thead>
<tr>
<th>Session #10</th>
<th>Radiolucent Lesions</th>
<th>Chapter 20</th>
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<td>4/30/13</td>
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<thead>
<tr>
<th>Session #11</th>
<th>Abnormalities of Teeth</th>
<th>Chapter 21</th>
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<td>5/7/13</td>
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<tr>
<th>Session #12</th>
<th>Quiz #5</th>
<th>Chapter 22</th>
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<tr>
<td>5/14/13</td>
<td>HIV and AIDS</td>
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<tr>
<th>Session #13</th>
<th>Skin Lesions</th>
<th>Chapter 23</th>
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<td>5/21/13</td>
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<tr>
<th>Session #14</th>
<th>Oral Presentations</th>
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<tr>
<td>5/28/13</td>
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<tr>
<th>6/4/13</th>
<th>Final Examination</th>
<th>Cumulative</th>
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<tr>
<td></td>
<td>Written Report Due</td>
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### XIV. GRADING RUBRIC:

Oral Pathology Research Report Grading Rubric:

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>Excellent (10 points)</th>
<th>Good (7-9 points)</th>
<th>Fair (4-6 points)</th>
<th>Poor (0-3 points)</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Report Quality</td>
<td>Excellent report quality. All components are included and covered well.</td>
<td>Good report quality. May be missing one component or have some areas that are not covered well.</td>
<td>Fair report quality. May be missing 2 or more components or have areas that are not covered well.</td>
<td>Poor report quality. Effort was not exerted. May be missing many key components of the report.</td>
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</tr>
<tr>
<td>Sources</td>
<td>At least 3 quality sources used (information and graphics) are current and accurately documented.</td>
<td>At least 2 sources (information and graphics) are of high quality. They are current and accurately documented.</td>
<td>Most sources are missing or are not current. Information is not documented properly.</td>
<td>Sources are not current, are unrelated or are not accurately documented.</td>
<td></td>
</tr>
<tr>
<td>Quality of Information</td>
<td>Information clearly relates to the main topic. It includes several supporting details and/or sources.</td>
<td>Information relates to the main topic. It provides some supporting details and/or sources.</td>
<td>Information vaguely relates to the main topic. No details and/or sources are given.</td>
<td>Information has little or nothing to do with the main topic.</td>
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</table>
**Oral Pathology Oral Presentation Grading Rubric:**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>Excellent (10 points)</th>
<th>Good (7-9 points)</th>
<th>Fair (4-6 points)</th>
<th>Poor (0-3 points)</th>
<th>Points</th>
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<tbody>
<tr>
<td>Stays on Topic</td>
<td>Stays on topic all (100%) of the time.</td>
<td>Stays on topic most (99-90%) of the time.</td>
<td>Stays on topic some (89%-75%) of the time.</td>
<td>It was hard to tell what the topic was.</td>
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</tr>
<tr>
<td>Preparedness</td>
<td>Student is completely prepared and has obviously rehearsed.</td>
<td>Student seems pretty prepared but might have needed a couple more rehearsals.</td>
<td>The student is somewhat prepared, but it is clear that rehearsal was lacking.</td>
<td>Student does not seem at all prepared to present.</td>
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</tr>
<tr>
<td>Content</td>
<td>Shows a full understanding of the topic.</td>
<td>Shows a good understanding of the topic.</td>
<td>Shows a good understanding of parts of the topic.</td>
<td>Does not seem to understand the topic very well.</td>
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<tr>
<td>Props</td>
<td>Student uses presentation media that show considerable work/creativity that is concise and well-organized.</td>
<td>Student uses presentation media that is creative and fairly concise and well-organized.</td>
<td>Student uses presentation media that is not weakly organized or fails to meet length requirements.</td>
<td>Student uses an inappropriate source of media. Media source may be disorganized or</td>
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<tr>
<td>Time-Limit</td>
<td>Presentation is very concise and informative. Is well-organized and falls within 1-5 minutes long.</td>
<td>Presentation is fairly concise and well-organized. Within 1-5 minutes long.</td>
<td>Presentation is somewhat disorganized or drawn out. May be missing key components or covering unnecessary components. Struggles to fall within 1-5 minutes.</td>
<td>Presentation drawn out or is missing key components. Is over or under 1-5 minutes.</td>
<td>inappropriate in length.</td>
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