

LAST REVIEW: 2010 - 2011

NEXT REVIEW: 2015 - 2016

STATUS: A

COURSE TITLE: DENTAL HYGIENE IV

COMMON COURSE NUMBER: DEH 2806

CREDIT HOURS: 2

CONTACT HOUR BREAKDOWN

CLOCK HOURS:

(Voc. Course ONLY)

Lecture: 2

Lab: 0

Clinic: 0

Other: N/A

PREREQUISITE(S): DEH 1002, DEH 1002L, DEH 2400, DEH 1800, DEH 1800L, DES 2050, DEH 1802, DEH 1802L, DEH 1602, DEH 1130, DES 1051, DEH 2701, DEH 2804L

COREQUISITE(S): DEH 2701L, DEH 2806L

PRE/COREQUISITE(S):

COURSE DESCRIPTION This course provides continuation of theoretical material related to clinical dental hygiene practice. It includes discussion on case information, dental hygiene treatment of advanced periodontal patients, patients with special needs and dental hygiene practice rules and regulations for the state of Florida.

UNIT TITLES

1. Debonding
2. Margination
3. Introduction of Special Needs Patients
4. Dental Hygiene Care throughout the Lifespan
5. Special Needs Patients with Specific Oral Conditions
6. Patients with Disabilities
7. The Homebound, Bedridden, or Helpless Patient
8. The Patient with Epilepsy
9. Patients with Blood Disorders
10. The Alcoholic Patient
11. Florida Laws and Rules
12. Portfolios

EVALUATION:

GRADING: Grades will be determined by the following:

Oral Presentation	25%	
Unit Exams	55%	(See Course Proposed Schedule)
Portfolio	5%	
Participation	15%	

The student's letter grade for this course will be determined by the departmental percentage scale:

92 - 100 = A
83 - 91 = B
75 - 82 = C
66 - 74 = D

F

A final grade of "C" or higher must be achieved in all Dental Hygiene courses for continuance in the Program.

All graded examinations and projects will be retained by the Dental Hygiene Department for the purpose of maintaining the student's academic records. The student may have access to his/her file upon request. An appointment may be necessary to do so.

The instructor will be available one half hour before and/or after each class for individual consultation. Meeting times must be scheduled in advance.

ACADEMIC DISHONESTY:

If a student commits any act of academic dishonesty according to BC Policy 6Hx2-5.02, such as but not limited to cheating or plagiarism, that student will receive an "F" grade for the course and may also be subject to disciplinary procedures in accordance with college policy. The Student Code of Conduct, BC Policy 6Hx2-5.02, gives a description of what acts may constitute academic dishonesty. These descriptions are also included in the BC Student Handbook and in the BC College Catalog. (Be aware as stated in the Dental Hygiene Student Handbook any act of Academic Dishonesty will result in the immediate dismissal of the student from the Dental Hygiene Program and does not merit previous written warning.)

DISRUPTIVE STUDENT POLICY:

All students will be bound by BC policy 6Hx2-5.19. Students who cannot conform to the standards of appropriate behavior as set forth in Broward College Policy 6Hx2-5.02, Student Responsibilities, shall not be permitted to interfere with other students' access to a college education. If in the opinion of the faculty the student is disruptive, faculty may ask a student to leave the classroom/clinic area for the class period. The student will be permitted to return upon the permission of the faculty.

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UNITS

Unit 1 Debonding

General Outcome:

1.0 The student shall: Describe the debonding procedure

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 1.1 Define bonding and debonding.
- 1.2 List the advantages and disadvantages of bonded brackets.
- 1.3 Describe conditions of the enamel that can result from improperly applied debonding techniques.
- 1.4 State the objectives of properly applied bracket removal techniques.
- 1.5 Describe the squeeze-release bracket removal technique.
- 1.6 State the reasons that a twisting motion is not used to remove brackets.
- 1.7 Name two methods of identification of residual resin.
- 1.8 Describe two methods of removal of large deposits of residual resin.
- 1.9 Explain why the two above methods should not be utilized if the resin is resistant.
- 1.10 Describe the use of the tungsten carbide bur in removal of residual resin.
- 1.11 Discuss the handpiece speed, technique, and bur selection when using the tungsten carbide bur.
- 1.12 Explain the polishing and finishing technique used to restore a pretreatment surface finish during debonding.
- 1.13 Describe the importance of a periodontal evaluation, examination for dental caries, and fluoride treatment following debonding.
- 1.14 Discuss debonding according to Florida Statutes, Chapter 466, Rule 21G.

Unit 2 Margination

General Outcome:

- 2.0 The student shall:** Explain the margination procedure.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 2.1** Define margination.
- 2.2** Describe the use of the amalgam knife, file, cleoid-discoïd carver, finishing strips, scalers, finishing burs and stones, discs, and ultrasonics in margination.
- 2.3** Explain the effects of overheating when utilizing power driven instruments.
- 2.4** List methods to prevent overheating when using power driven instruments.
- 2.5** Describe the polishing and finishing procedures that should be used following margination.
- 2.6** Discuss margination as performed by the dental hygienist according to Florida Statutes, Chapter 466, Rule 21G.

Unit 3 Introduction To Special Needs

General Outcome:

- 3.0 The student shall:** Specify the barriers to oral health care that patients with special needs may face and the dental hygienist's obligation to provide quality dental hygiene services for all patients.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 3.1** Explain the dental hygienist's obligation to all patients.
- 3.2** Describe the role of the dental hygienist with special needs patients.
- 3.3** Define the following:
- labeling
 - barrier free environment
 - normalization
 - mainstreaming
 - access to oral health care
- 3.4** Describe several potential barriers to oral health care.

Unit 4 Dental Hygiene Care Throughout The Lifespan

General Outcome:

- 4.0 The student shall:** Trace the special dental and care needs that patients may have throughout their lifetime.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 4.1** Identify the trimester in which the fetus is most susceptible to injuries and malformations.
- 4.2** Describe gingival conditions that can occur during pregnancy including generalized and isolated gingival enlargement and enamel erosion.
- 4.3** Identify the clinical appearance, predisposing factors, and causes of gingival enlargement and enamel erosion.
- 4.4** Discuss treatment planning regarding radiographs, periodontal treatment, and restorative dentistry during pregnancy.
- 4.5** Explain why it is difficult to identify drugs that produce teratogenicity.
- 4.6** Recognize proven and suspected teratogenic drugs that may be taken during pregnancy.
- 4.7** List appointment considerations, adaptations, and procedures that may be required for the pregnant patient.
- 4.8** State the importance of a medical history review for the pregnant patient.
- 4.9** Discuss patient instructions that may be recommended for the pregnant patient with regard to diet, home care, dental caries, and tooth structure.
- 4.10** Explain the relationship or prenatal fluoride intake and the incidence of dental caries in the child.
- 4.11** Explain the FDA pregnancy categories and their significance.
- 4.12** Describe recommendations that can be made for the newborn regarding fluoride, the first dental visit, home care, and diet.
- 4.13** Discuss the relative safety of commonly used dental drugs for the pregnant patient and the fetus and the breast-fed baby.

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- 4.14** Explain what actions the dental hygienist should take when prescribing any medication for the pregnant patient in order to minimize the possibility for future legal problems.
- 4.15** List oral conditions that are common to adolescents.
- 4.16** Describe methods that can be used to most effectively communicate with adolescents.
- 4.17** Discuss oral conditions that can be related to oral contraceptives, menstruation, and menopause.
- 4.18** List the vitamin deficiencies that may result with use of oral contraceptives.
- 4.19** Name physiologic changes that occur with normal aging.
- 4.20** Describe oral changes that may occur with aging.
- 4.21** Relate the symptoms of osteoporosis and Alzheimer's disease.
- 4.22** List impairments associated with the four stages of Alzheimer's disease.
- 4.23** Discuss personal factors that may affect the lives of the elderly.
- 4.24** Describe methods to most effectively communicate with geriatric patients.
- 4.25** State several factors that influence food selection and eating habits of the elderly.
- 4.26** Discuss RDA's for the elderly.
- 4.27** List mineral and vitamin deficiencies commonly found in the elderly.
- 4.28** Describe oral conditions associated with degenerative and disease processes which influence nutrition of the elderly.
- 4.29** Name the drugs that may influence taste and appetite.
- 4.30** Explain how drugs may have an effect on the metabolism of various nutrients.
- 4.31** List several methods to compensate for the social and psychological factors influencing diet in the elderly.
- 4.32** State the daily calorie needs for the elderly.
- 4.33** Develop a dietary plan for new denture wearers.

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Unit 5 Special Needs Patient With Specific Oral Conditions

General Outcome:

- 5.0 The student shall:** Describe the special needs of patients with specific oral conditions.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 5.1** Describe changes that may occur to the alveolar ridges and oral mucosa as a result of dentures.
- 5.2** Discuss sensory changes that may occur as a result of wearing dentures.
- 5.3** Name three causes of denture induced oral lesions.
- 5.4** Discuss the appearance of six types of denture induced oral lesions.
- 5.5** Explain the need for edentulous patients to schedule regular oral hygiene appointments.
- 5.6** Describe the technique for marking dentures.
- 5.7** Compare a cleft palate and a cleft lip.
- 5.8** Recognize the seven classifications of clefts.
- 5.9** State the etiology of clefts.
- 5.10** Discuss oral and general physical characteristics of people with cleft lips and palates.
- 5.11** List several treatment options that are available for patients with cleft lips and palates.
- 5.12** Name appointment considerations that should be incorporated when working with a patient with clefts.
- 5.13** Discuss the importance of good health prior to performance of oral and maxillofacial surgery.
- 5.14** Describe specific orally related problems or conditions that may occur as a result of fixation apparatus applied to fractured jaws.

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- 5.15** Discuss diet considerations for the patient with a fractured jaw.
- 5.16** Give home care instructions for a patient with a fractured jaw.
- 5.17** Explain dental hygiene instrumentation procedures for the patient with fixation apparatus or a fractured jaw prior to surgery, during treatment, and after removal of appliances.
- 5.18** Differentiate between benign and malignant neoplasms.
- 5.19** List three predisposing factors to oral cancer.
- 5.20** State three forms of treatment for oral cancer.
- 5.21** Discuss oral effects of radiation therapy.
- 5.22** Describe side effects and oral complications of chemotherapy.
- 5.23** Explain dental hygiene care for the patient with oral cancer.
- 5.24** Discuss the manner in which the antineoplastic drug influences the different stages in the reproduction of a cell.
- 5.25** Name the major classifications of antineoplastic drugs and give an example of each.
- 5.26** Describe the adverse effects of antineoplastic drugs and the symptoms that may result.

Unit 6 Patient with Disabilities

General Outcome:

- 6.0** The **student shall:** Relate the special needs of patients with various disabilities.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 6.1** Define developmental disabilities according to the Developmental Disabilities Assistance and Bill of Rights Act of 1987.
- 6.2** List several disabling conditions.
- 6.3** Name specific information that should be included in the disabled patient's medical and dental history.
- 6.4** Discuss consent forms and the disabled patient.
- 6.5** List considerations that must be made in the dental office to provide a barrier free environment.
- 6.6** Describe how to complete a wheelchair transfer.
- 6.7** Discuss seating a patient with a walker, crutches, or a cane.
- 6.8** List factors to consider in positioning a disabled patient.
- 6.9** Contrast high, moderate, and low functioning level.
- 6.10** Name modifications that can be made to toothbrushes to accommodate special needs.
- 6.11** Explain plaque removal instructions that can be given to those who will be providing direct care to the disabled patient.
- 6.12** State special techniques for dental hygiene instrumentation that may be required with disabled patients.

- 6.13 Differentiate between mental retardation and mental illness.
- 6.14 List the levels of mental retardation and their adaptive functioning.
- 6.15 Name several causes of mental retardation.
- 6.16 State several general and oral characteristics that are commonly associated with those who are mentally retarded.
- 6.17 Describe the physical characteristics of a patient with Down's Syndrome.
- 6.18 Discuss Hepatitis B and the Down's Syndrome patient.
- 6.19 List personal characteristics of the patient with Down's Syndrome which may influence patient management.
- 6.20 List behavioral characteristics of patients with autism.
- 6.21 Name several steps that can be taken to provide an autistic patient with a structured environment.
- 6.22 Differentiate between neurosis and schizophrenia.
- 6.23 List two phenothiazines and describe their pharmacological and adverse effects.
- 6.24 Describe the symptoms of the following adverse reactions:
 - orthostatic hypotension
 - extrapyramidal symptoms
 - tardive dyskinesia
 - anticholinergic effects
- 6.25 Describe modifications in dental hygiene treatment and patient management that would be required for patients taking antipsychotic agents or antidepressants.
- 6.26 Discuss the pharmacological and adverse effects of tricyclic antidepressants.
- 6.27 Name two new antidepressants and describe their advantages.
- 6.28 Describe MAOI's and explain the importance of not giving any drug to the patient taking MAOI's without physician consultation.

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6.29 Define the following terms:

paresis
 quadriplegia
 paraplegia
 hemiplegia
 triplegia

6.30 State the symptoms and the emergency care for the patient with autonomic dysreflexia.

6.31 Define orthosis.

6.32 Create a chart including 1) symptoms, 2) oral manifestations, 3) special patient needs, and 4) impact on dental hygiene care for patients with the following conditions:

myelomeningocele	cerebral palsy
cerebrovascular accident	Bell's palsy
muscular dystrophy	Parkinson's disease
myasthenia gravis	arthritis
multiple sclerosis	scleroderma

6.33 Describe the anatomy and function of the parasympathetic and sympathetic nervous systems.

6.34 Explain the effects that adrenergic and cholinergic nervous systems have on the body.

6.35 Describe the action of neurotransmitter.

6.36 List and describe four drug groups that exert their effects primarily on the ANS.

6.37 Differentiate between direct acting and indirect acting agents.

6.38 List the pharmacological effects of cholinergic drugs.

6.39 Describe adverse reactions to cholinergic drugs.

6.40 State contraindications to cholinergic drugs.

6.41 List uses of cholinergic drugs.

6.42 Describe the action of anticholinergic drugs.

6.43 List the pharmacological effects of anticholinergic drugs.

6.44 State the uses of anticholinergic drugs.

6.45 Describe the adverse reactions of anticholinergic drugs.

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- 6.46** List the contraindications of anticholinergic drugs.
- 6.47** Discuss drug interactions associated with anticholinergic drugs.
- 6.48** List the major neurotransmitter in the SANS.
- 6.49** Define catecholamine and give examples of endogenous and exogenous catecholamine.
- 6.50** Discuss the effects of alpha and beta-receptor effects of epinephrine, norepinephrine and isoproterenol on blood pressure, heart rate, and blood vessels.
- 6.51** Describe the uses of adrenergic drugs.
- 6.52** Discuss the action of beta blocking agents.
- 6.53** Discuss dental hygiene care of the totally blind and the partially sighted patient.
- 6.54** Name four types of hearing impairment.
- 6.55** List characteristics of patients who may have an unidentified hearing loss.
- 6.56** Discuss dental hygiene care of the hearing impaired patient.

Unit 7 The Homebound, Bedridden, or Helpless Patient

General Outcome:

7.0 The student shall: Describe provision of care for patients that are homebound, bedridden, or helpless.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 7.1** Describe positioning for the patient in bed and in a wheelchair.
- 7.2** List options for lighting.
- 7.3** State characteristics that may be found in patients who are undergoing monotonous confinement.
- 7.4** Name the objectives of care for the unconscious or helpless patient.
- 7.5** Describe the use of the toothbrush with the suction attachment.

Unit 8 The Patient with Epilepsy

General Outcome:

8.0 The student shall: Explain the special needs of patients with epilepsy.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 8.1** Define epilepsy and seizure.
- 8.2** Differentiate among simple partial, complex partial, generalized absence, and generalized tonic-clonic seizures.
- 8.3** Describe the general and oral manifestations of Phenytoin.
- 8.4** Explain the treatment of Phenytoin-induced gingival overgrowth.
- 8.5** Discuss factors that must be considered when providing dental hygiene care for the patient taking valporic acid.
- 8.6** List the steps in providing emergency care for the patient having a seizure.
- 8.7** Describe dental hygiene care for a patient with epilepsy.
- 8.8** Discuss major adverse reactions associated with Carbamazepine and Depakote.
- 8.9** Describe the adverse reactions associated with epileptic patients who are taking several medications.

Unit 9 Patients With Blood Disorders

General Outcome:

9.0 The student shall: Relate the provision of care for patients with blood disorders.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 9.1** List the oral conditions that may suggest the presence of a blood disorder.
- 9.2** State the components and the ranges of normal blood.
- 9.3** Differentiate between anemia and polycythemia.
- 9.4** Describe the clinical characteristics of anemia's.
- 9.5** Compare causes and symptoms of iron deficiency anemia and the megaloblastic anemia's.
- 9.6** Discuss the disease process of sickle cell anemia.
- 9.7** List the implications for dental hygiene treatment of the patient with sickle cell anemia.
- 9.8** Contrast leukopenia with leukocytosis.
- 9.9** List the 1) causes, 2) disease process, 3) symptoms, 4) treatments, 5) oral manifestations, and 4) implications for dental hygiene care for the patient with leukemia.
- 9.10** Name three types of hemorrhagic disorders.
- 9.11** Describe dental hygiene care for the patient with hemophilia.
- 9.12** State complications in hemophilia patients due to frequent replacement therapy.

Unit 10 The Alcoholic Patient

General Outcome:

- 10.0 The student shall:** Specify the special needs and provision of care for the alcoholic patient.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 10.1** Discuss the signs of alcohol abuse and alcohol dependence.
- 10.2** State the etiology of alcoholism.
- 10.3** Name the systemic effects and health hazards of alcohol abuse.
- 10.4** Describe the causes and symptoms of Fetal Alcohol Syndrome.
- 10.5** Explain dental hygiene care of the alcoholic patient.
- 10.6** Define the following terms: psychological dependence, tolerance, physical dependence, withdrawal syndrome, and addiction.
- 10.7** Explain the concept of methadone maintenance.
- 10.8** Explain why alcohol is included as a sedative-hypnotic.
- 10.9** Describe long term problems associated with cigarette and marijuana smoking.
- 10.10** Describe oral changes associated with smokeless tobacco.
- 10.11** State the adverse effects of cocaine use.

Unit 11 Florida Laws and Rules**General Outcome:**

11.0 The student shall: Explain the Florida Statutes as they relate to the Board of Dentistry.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 11.1 State the purpose of dental laws.
- 11.2 Define Board, Dentist, and Dentistry.
- 11.3 Describe the purpose of Chapter 466.
- 11.4 Define Direct Supervision, Indirect Supervision, General Supervision, Irremediable Tasks, and Remediable Tasks.
- 12.5 Describe the members of the Board of Dentistry.
- 11.6 State those persons exempt from Chapter 466.
- 11.7 Describe the Council on Dental Hygiene.
- 11.8 Describe the Council on Dental Assisting.
- 11.9 State what is included in the dental examination for licensure as a dental hygienist.
- 11.10 State rules and statutes that pertain to Chapter 466 as required for the written examination on the law and rules.
- 11.11 List those tasks delegable to the dental hygienist that require formal training and involve direct supervision.
- 11.12 Define those tasks delegable to the dental hygienist that require formal training and involve indirect supervision.
- 11.13 State those tasks delegable to the dental hygienist that require formal training and involve general supervision.
- 11.14 List those tasks delegable to the dental hygienist that entail on the job training and involve general supervision.
- 11.15 Describe those tasks delegable to the dental hygienist that entail on the job training and involve direct supervision.

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Unit 12 Portfolios

General Outcome:

- 12.0 The student shall:** Complete the Dental Hygiene Portfolio exhibiting the compilation of previously learned skills and knowledge to create lifelong learning.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 12.1** Complete a professional portfolio exhibiting work in all aspects of the dental hygiene program:
- Goals – long term
 - Objectives- short term program
 - Self-assessments
 - Clinic work showcase
 - Classroom presentation
 - Learning experiences
 - Resume