

D H 314: DENTAL HEALTH EDUCATION

Foothill College Course Outline of Record

Heading	Value
Effective Term:	Summer 2021
Units:	2
Hours:	2 lecture per week (24 total per quarter)
Advisory:	PSYC 1 or 1H; not open to students with credit in D H 73.
Degree & Credit Status:	Degree-Applicable Credit Course
Foothill GE:	Non-GE
Transferable:	CSU
Grade Type:	Letter Grade Only
Repeatability:	Not Repeatable

Student Learning Outcomes

- The student will submit an e-portfolio project as documentation of their competency in patient education and oral hygiene products.
- The student will research an oral health topic and present a summary of the research findings to the class. The student must receive a score of 75% or higher.

Description

Health communication and learning theories applied to patient education. Topics include: communication theory, health literacy, working with interpreters, development of client/clinician relationships, patient motivation with particular attention to psychological, social, and economic, cultural and life stage factors. Emphasis on prevention of dental diseases through effective patient education, such as: mechanical plaque removal techniques, antimicrobial therapies, nutritional counseling for dental hygiene, and smoking cessation counseling. Preventive dental products will be reviewed and analyzed using current evidence based literature. Intended for students in the Dental Hygiene Baccalaureate Degree Program; enrollment is limited to students accepted in the program.

Course Objectives

The student will be able to:

- Give examples and apply communication and educational techniques that are necessary for delivering oral health instruction to patients and successful for short-term and long-term patient motivation, with attention to stage of life, cultural background and health literacy level.
- Describe, demonstrate and state the indications and contraindications for the various types of mechanical plaque removal devices for patient self-care.
- Compare the professionally applied oral chemotherapeutic agents, including indications and contraindications, active ingredients and methods of application.
- Describe the purposes and characteristics of dental indices used for data collection and as an epidemiological tool.
- Use the Cronometer.com resources, perform a nutritional analysis on a patient and create a patient dietary recommend document and present to the recommendations for modifications to the patient.

- Describe the steps in the 5 A's of tobacco cessation counseling and give examples of the oral/systemic effects of tobacco use.
- Evaluate the causes of dental hypersensitivity and compare the home and professionally applied procedures that have been shown effective in controlling hypersensitivity.
- Research a dental health product using current evidence based literature and present the findings following the established criteria.

Course Content

- Principles of communication and education theories
 - Principles of communication theory
 - Developing patient rapport
 - The law of effect
 - Framework for identifying and analyzing performance problems
 - Process of effective communication
 - Small step size
 - Active participation
 - Immediate feedback
 - Self pacing
 - Motivational theories and models used patient education
 - Health Belief Model
 - Maslow's Hierarchy of Needs
 - Stages in making a commitment to a new behavior
 - Avoiding anxiety
 - Learning ladder model
 - Motivational interviewing
- Mechanical plaque removal
 - Toothbrushing
 - Characteristics of an acceptable toothbrush
 - Toothbrushing methods: scrub method, roll stroke, modified Stillman's method, Charter's method, Bass method
 - Consideration for special situations: orthodontics, implants
 - Modifications for special needs patients
 - ADA seal of acceptance
 - Power toothbrushes
 - Tongue brushing
 - Interproximal plaque removal
 - Devices for interproximal plaque removal: dental floss, floss holder, floss threader, super floss, perio-aid, stimudent, interproximal brush
 - Indications and contraindications for use
 - Adaptive devices
 - Embrasure space considerations
 - Auxiliary plaque removal/massaging techniques
 - Rubber tip stimulator
 - Oral irrigator
- Dentifrices
 - ADA seal of acceptance
 - Dentifrice ingredients
 - Mechanism of action
 - Types of dentifrices: sensitivity, whitening, anti-plaque, anti-tartar
 - Evidence based research comparison of dentifrices
 - Abrasiveness: particle size, shape, hardness
- Antimicrobial therapy
 - Mouth rinses
 - ADA approved mouth rinses
 - Active ingredients in mouth rinses
 - Caries prevention mouth rinses
 - Cosmetic whitening
 - Antigingivitis
 - Halitosis control
 - Xerostomia

- h. Cleaning debridement
- 2. Professionally applied antimicrobials
 - a. Local drug delivery
 - 1) Chlorhexidine gluconate
 - 2) Doxycycline
 - 3) Minocycline
 - b. Indications and contraindications
 - c. Preprocedure
 - 1) Patient education
 - 2) Informed consent
 - d. Procedure for placement
 - e. Post procedure
 - 1) Post operative instructions
 - 2) Re-evaluation
- D. Dental indices
 - 1. Characteristics of dental indices
 - a. Numerical scoring
 - b. Calibration among examiners
 - c. Reliability
 - 2. Types of dental indices
 - a. Oral hygiene status indices
 - 1) OHI-S
 - 2) Plaque control record
 - 3) Plaque index
 - b. Calculus indices
 - 1) Simplified calculus index
 - c. Gingival indices
 - 1) Modified gingival index
 - 2) Gingival index
 - d. Periodontal indices
 - 1) Community periodontal index of treatment needs
 - 2) Periodontal scoring and recording index
 - 3) Periodontal index
 - 4) Periodontal screening exam
 - e. Dental caries indices
 - 1) DMFT/deft
 - 2) DMFS/dmfs
- E. Nutritional counseling
 - 1. Resources for nutritional analysis
 - a. ChooseMyPlate.gov
 - b. Evidence based literature
 - c. Reputable websites
 - d. Dietary Guidelines for Americans 2010
 - 2. Nutritional counseling for the prevention of dental caries
 - a. Principles of dietary assessment
 - b. Dietary modifications for specific dental conditions
 - 1) Oral manifestations associated with nutrition imbalance
 - 2) Sugar consumption
 - 3) Frequency of snacking
 - 4) Fluid balance and xerostomia
 - 5) Dental erosion
 - 6) Fermentable carbohydrates and dental caries
 - c. Counseling techniques
 - 3. Dietary assessment tools
 - a. 24-hour recall
 - b. Food records/logs
 - 4. Effective communication for nutritional counseling
 - a. Patient centered approach
 - b. Appropriate body language
 - c. Active listening
 - d. Foster patient learning
 - e. Appropriate questions

- f. Non-judgmental approach
- 5. Twelve steps to dietary assessment
 - a. Provide instructions on completion of food record
 - b. Review food record
 - c. Review patient history
 - d. Provide nutritional education
 - e. Examine calorie needs
 - f. Examine recommended food group amounts
 - g. Examine amount consumed for each food group
 - h. Examine adequacy of the diet
 - i. Examine dietary risk(s) for dental caries
 - j. Guide dietary and lifestyle modifications
 - k. Document in patient record
 - l. Evaluate patient's progress
- F. Tobacco cessation
 - 1. Motivational interviewing for cessation
 - 2. 5 A's of tobacco cessation
 - a. Ask
 - b. Advise
 - c. Assess
 - d. Assist
 - e. Arrange
 - 3. Oral and systemic effects of tobacco use
 - a. Oral cancer risk
 - b. Smoking and alcohol use
- G. Dentinal hypersensitivity
 - 1. Theories of dentinal hypersensitivity
 - a. Dentin innervation theory
 - b. Odontoblastic transducer theory
 - c. Hydrodynamic theory
 - 2. Causes of hypersensitivity
 - a. Caries
 - b. Fractured tooth
 - c. Dentin exposure
 - d. Pulp exposure
 - e. Fractured restoration
 - f. Traumatic occlusion
 - g. Pulpitis
 - 3. Treatment of hypersensitivity
 - a. Home care products
 - b. Professionally applied products
 - c. In office treatments
- H. Evidence based dental hygiene practice
 - 1. Researching dental health products
 - 2. Evidence based journal articles
 - 3. Literature search
 - 4. Written research report on dental health product
 - 5. Oral report dental health product

Lab Content

Not applicable.

Special Facilities and/or Equipment

When taught via Foothill Global Access, on-going access to computer with email software and hardware; email address.

Method(s) of Evaluation

Methods of Evaluation may include but are not limited to the following:

Midterm

Final exam

Oral presentation and written report on oral health product research

E-portfolio: written reflection papers on the four DH program

competencies, posting on research report and project video

Dietary analysis and nutritional recommendations for a patient

Method(s) of Instruction

Methods of Instruction may include but are not limited to the following:

Lecture

Discussion

Oral presentations

Case study exercises

Representative Text(s) and Other Materials

Bowen, D., and J. Pieren. Darby and Walsh Dental Hygiene Theory and Practice, 5th ed.. 2019.

Gehrig, J.S.. Patient Assessment Tutorials, 4th ed.. 2017.

Hoang, L. DH 314 Lecture Slides, 2021.

Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

A. Weekly reading assignments in textbook, course syllabus and current evidence based journal articles, 25-75 pages per week.

B. Research on oral care product.

C. E-portfolio submission on dental health education.

Discipline(s)

Dental Technology