# **DH R040: ADVANCED CLINICAL TOPICS IN DENTAL HYGIENE**

Originator

aderdiarian

# Co-Contributor(s)

#### Name(s)

Newville, Margaret (mnewville)

#### College

Oxnard College

**Discipline (CB01A)** DH - Dental Hygiene

Course Number (CB01B) R040

**Course Title (CB02)** Advanced Clinical Topics in Dental Hygiene

Banner/Short Title Advanced Clinical Topics in DH

Credit Type Credit

Start Term Spring 2021

# **Catalog Course Description**

This course emphasizes advanced dental hygiene skills and procedures; state board patient selection; ways to minimize occupational hazards common to dental practice; and interactional skill development for the dental practice. Limitations on Enrollment: Physical/ clinical examiniation (within the last 12 months); Negative Tuberculosis Mantoux test or chest x-ray; Hepatitis B vaccine and titer; Tetanus vaccine; Titers showing immunity to Rubella, Rubeola, and Varicella; and CPR certification. Field trips may be required.

# Taxonomy of Programs (TOP) Code (CB03)

1240.20 - \*Dental Hygienist

# **Course Credit Status (CB04)**

D (Credit - Degree Applicable)

Course Transfer Status (CB05) (select one only)

C (Not transferable)

Course Basic Skills Status (CB08)

N - The Course is Not a Basic Skills Course

SAM Priority Code (CB09)

**B** - Advanced Occupational

# Course Cooperative Work Experience Education Status (CB10)

N - Is Not Part of a Cooperative Work Experience Education Program

# **Course Classification Status (CB11)**

Y - Credit Course

# Educational Assistance Class Instruction (Approved Special Class) (CB13)

N - The Course is Not an Approved Special Class

Course Prior to Transfer Level (CB21)

Y - Not Applicable

Course Noncredit Category (CB22) Y - Credit Course

**Funding Agency Category (CB23)** Y - Not Applicable (Funding Not Used)

**Course Program Status (CB24)** 1 - Program Applicable

**General Education Status (CB25)** Y - Not Applicable

Support Course Status (CB26) N - Course is not a support course

Field trips May be required

Grading method Letter Graded

Does this course require an instructional materials fee? No

Repeatable for Credit No

Is this course part of a family? No

# **Units and Hours**

Carnegie Unit Override No

**In-Class** 

Lecture Minimum Contact/In-Class Lecture Hours 17.5 Maximum Contact/In-Class Lecture Hours 17.5

Activity

Laboratory Minimum Contact/In-Class Laboratory Hours 52.5 Maximum Contact/In-Class Laboratory Hours 52.5

# **Total in-Class**

Total in-Class Total Minimum Contact/In-Class Hours 70 **Total Maximum Contact/In-Class Hours** 70

# **Outside-of-Class**

Internship/Cooperative Work Experience

Paid

Unpaid

# **Total Outside-of-Class**

Total Outside-of-Class Minimum Outside-of-Class Hours 35 Maximum Outside-of-Class Hours 35

# **Total Student Learning**

Total Student Learning Total Minimum Student Learning Hours 105 Total Maximum Student Learning Hours 105

Minimum Units (CB07) 2

Maximum Units (CB06)

2

# Prerequisites

DH R030 and DH R031 and DH R032 and DH R033 and DH R034 and DH R035 and DH R036

Corequisites DH R041 and DH R042 and DH R043 and DH R044 and DH R045

# **Limitations on Enrollment**

Current CPR certification for health care provider (American Heart Association) or professional rescuer (American Red Cross) Proof of freedom from and immunity to communicable diseases No acrylic or long nails in clinical settings Current negative TB test or chest x-ray Physical examination demonstrating general good health No visible tattoos or visible body piercings except single studs in earlobes

# **Entrance Skills**

**Entrance Skills** 

Students must have advanced skills in special/geriatric patients.

# **Prerequisite Course Objectives**

DH R030-Compare and contrast patient characteristics, motivation and management of individual patients

DH R030-Analyze how to establish positive interpersonal communication with patients

DH R030-Identify medically compromised patients and special needs patients and apply proper oral hygiene procedures

DH R030-Identify extra-oral risk factors affecting the older adult and their oral health

DH R030-Recognize unusually apprehensive patient and demonstrate how to establish confidence within the patient DH R030-Assess the older adult's periodontal needs and home care

DH R031-Identify roles and sources of vitamins and minerals that are essential to oral health and general well-being

#### Entrance Skills

Students must have advanced skills in dental nutritional counseling.

#### **Prerequisite Course Objectives**

DH R031-Compare and contrast factors in the relationship of nutrition and dental health

DH R031-Analyze the digestive mechanisms

DH R031-Evaluate the nutritional status of patients

DH R031-Perform nutrition counseling with dental patients

DH R031-Evaluate a 3-4 day dietary history of a patient with regard to sugar exposures and nutritional adequacy/quality, and counsel the patient accordingly

DH R031-Identify disorders relating to inadequate intake or absorption of carbohydrates, essential lipids, protein, vitamins and minerals

DH R031-Compare and contrast factors in the relationship between nutrition and dental health

DH R031-Identify key structural features, functions, major metabolic pathways, and nutritional roles of carbohydrates, lipids, and proteins

. DH R031-Identify roles and sources of vitamins and minerals that are essential to oral health and general well-being DH R031-List the essential amino acids and explain what makes them "essential"

#### Entrance Skills

Students must have advanced skill in dental materials.

#### **Prerequisite Course Objectives**

DH R032-Explain and distinguish between the various restorative materials used in dentistry

DH R032-Assess the physical, electrical, and mechanical properties of materials used in dentistry

DH R032-Explain the effects the oral environment may have on dental materials, as well as the effect dental materials may have on the oral environment

DH R032-Explain the role preventive dental materials play in preventing oral diseases

DH R032-Assess the various types of materials used for esthetic dental restorations

DH R032-Indicate the significance of accuracy in using impression materials and restorative materials

DH R032-Create a model cast or die used in dentistry to duplicate accurately the hard and/or soft oral tissues

DH R032-Explain the legal and ethical ramifications of different levels of treatment

#### **Entrance Skills**

Student must have moderate skills in instrumentation and treatment planning.

#### **Prerequisite Course Objectives**

DH R034-Provide treatment for moderately complex adult and pediatric dental hygiene cases.

- DH R034-Duplicate various moderately advanced scaling and polishing techniques and fluoride applications
- DH R034-Provide oral inspections, cancer screening, dental and periodontal charting, and nutritional counseling
- DH R034-Use ultrasonic scaling devices as appropriate

DH R034-Administer local anesthetic as appropriate

DH R034-Perform soft tissue curettage with a maximum of patient comfort and safety

DH R034-Use chemotherapeutic agents in the treatment of periodontal disease as appropriate

DH R034-Apply periodontal dressings as appropriate

DH R034-Perform oral irrigation procedures competently

DH R034-Perform periodontal charting on a clinic patient to determine more advanced treatment plans as necessary by degree of patient difficulty

#### **Entrance Skills**

Students must have advanced knowledge of periodontics.

#### **Prerequisite Course Objectives**

DH R035-Provide dental hygiene care for all types of classifications of periodontal diseases including patients who exhibit moderate to severe periodontal disease

DH R035-Competently evaluate current scientific literature

DH R035-Utilize problem-solving strategies related to comprehensive patient care and management of patients

DH R035-List, describe and differentiate various periodontal diseases in a classification system as established by the American Academy of Periodontology.

DH R035-Identify periodontal risk factors that affect onset, progression and severity of periodontal diseases

DH R035-Define and describe various evaluative methods (probing, clinical attachment levels, bleeding and exudate, mobility, etc.) needed to measure variations from periodontal health.

DH R035-Recognize the rationale, objectives and therapies involved in the various levels of dental hygiene care (preventive oral prophylaxis, therapeutic root debridement and professional periodontal maintenance).

DH R035-Determine the patient's use and understanding of preventive (oral self-care) measures and oral health goals.

DH R035-Recognize the need for medical and/or dental referral when appropriate

DH R035-Develop individual, evidence-based, comprehensive, sequenced dental hygiene care plans for patients using diagnostic information that incorporates the patient's history, goals, values and motivations, clinical assessment, diagnosis, economics and other dental needs.

DH R035-Use evidence-based protocols to identify periodontal therapies that will reduce the bacterial load and those that modulate the host response.

DH R035-Describe the role of occlusal trauma in periodontal disease.

DH R035-Explain the objectives, rationale, indications, contraindications, and methodology for the most commonly performed periodontal surgical procedures.

DH R035-Describe the types of dental implants used in dentistry, and describe the procedure for implant placement.

DH R035-Describe the techniques, instruments and procedures for implant maintenance, including self-care aids for patients with implants.

DH R035-Explain the role of the re-evaluation appointment in determining the next phase of periodontal treatment.

DH R035-Describe the components of the re-evaluation appointment.

DH R035-Discuss the objectives of periodontal maintenance and describe the components of periodontal maintenance.

DH R035-Describe ad demonstrate effective interpersonal relationships and effective oral and written communication skills with patients, colleagues, and other professionals and lay people.

DH R035-Explain how an evidence-based decision-making approach enhances critical thinking and professional decision-making regarding patient care.

#### **Entrance Skills**

Students must display knowledge in case presentations, instrumentation, periodontics, chemotherapeutic agents, local anesthetics, and patient education.

#### **Prerequisite Course Objectives**

DH R033-Develop a case presentation

DH R033-Explain the rationale for soft tissue curettage

DH R033-Explain oral irrigation procedures and the purpose for its use in dental hygiene treatment

DH R033-Describe the use of chemotherapeutic agents in the treatment of periodontal disease

DH R033-Describe the use of ultrasonic scalers

DH R033-Prepare more advanced treatment plans as necessary by degree of patient difficulty

DH R033-Prepare for the National Boards

DH R033-List and identify post-operative instructions for a patient and provide as needed

DH R033-Describe healing of tissues after periodontal instrumentation

DH R033-Describe the proper maintenance of dental implants

DH R033-Assess the elements involved in and rationale behind dental specific treatment plans, especially for patients who present with moderate periodontal involvement

DH R033-Predict the elements involved in implementing non-surgical periodontal therapy as it applies in a clinical and private practice setting

DH R033-Compare and contrast with peers and faculty the overall issues of dental hygiene practice as it relates to clinical practice and performance in private practice

DH R033-Prepare an oral discussion and typed summary of a literature paper on a selected topic

DH R033-Analyze and interpret the data to formulate a dental hygiene diagnosis

DH R033-Describe medical conditions that require treatment modifications prior to or during dental hygiene treatment

DH R033-Evaluate the periodontium, and identify conditions that compromise periodontal health and function

DH R033-Analyze published reports of oral health and apply this information to the practice of dental hygiene

# **Requisite Justification**

Requisite Type Prerequisite

Requisite DH R030

**Requisite Description** Course in a sequence

Level of Scrutiny/Justification Content review

# **Requisite Type**

Prerequisite

#### Requisite DH R031

**Requisite Description** Course in a sequence

Level of Scrutiny/Justification Content review

oontent review

# **Requisite Type** Prerequisite

Requisite DH R032

Requisite Description Course in a sequence

Level of Scrutiny/Justification Content review

# Requisite Type Corequisite

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Requisite DH R033

**Requisite Description** Course in a sequence

Level of Scrutiny/Justification Content review

**Requisite Type** Prerequisite

Requisite DH R034

**Requisite Description** Course in a sequence

Level of Scrutiny/Justification Content review

**Requisite Type** Prerequisite

Requisite DH R035

Requisite Description Course in a sequence

Level of Scrutiny/Justification Content review

# **Requisite Type** Prerequisite

# Requisite

DH R036

# **Requisite Description**

Course in a sequence

# Level of Scrutiny/Justification

Content review

# **Requisite Type**

Corequisite

Requisite DH R041

# **Requisite Description**

Course in a sequence

#### Level of Scrutiny/Justification Content review

# **Requisite Type** Corequisite

Requisite DH R042

# **Requisite Description** Course in a sequence

Level of Scrutiny/Justification Content review

# **Requisite Type** Corequisite

Requisite DH R043

**Requisite Description** Course in a sequence

Level of Scrutiny/Justification Content review

**Requisite Type** Corequisite

Requisite DH R044

**Requisite Description** Course in a sequence

Level of Scrutiny/Justification Closely related lecture/laboratory course

#### **Requisite Type**

Concurrent

Requisite DH R045

# **Requisite Description**

Course in a sequence

# Level of Scrutiny/Justification

Content review

#### Student Learning Outcomes (CSLOs)

	Upon satisfactory completion of the course, students will be able to:
1	Properly identify the conditions that are the most likely cause of burnished calculus.
2	List examples of common root morphology problems encountered that make exploration difficult.
3	List the criteria for selection of an appropriate clinical board patient.

#### **Course Objectives**

	Upon satisfactory completion of the course, students will be able to:
1	Illustrate advanced root instrumentation
2	Illustrate the use of alternative fulcrums and reinforced finger rests
3	Practice instrumentation utilizing modified periodontal instruments (Mini Five, Curvettes, Langer Curets)
4	Illustrate the maintenance of dental implants
5	Illustrate proficiency in placement and removal of periodontal dressings
6	Recognize the types of suture placement and methods of removal
7	List examples of common root morphology problems encountered that make exploration difficult
8	Describe the conditions that most likely cause burnished calculus
9	Describe the difference between hoes, files, and sickles
10	Duplicate use of a hoe and file on anterior and posterior teeth of a manikin
11	List the criteria for selection of an appropriate state board patient
12	List the criteria for selection of an appropriate clinical board patient by describing reasons for failure to pass the California state board examination.
13	Describe the most common occupational hazards for dental hygienists
14	Describe the relationship of operator body positioning, patient body and head positioning, and the reduction of injury to the dental hygienist
15	Describe the advantages of reinforced scaling
16	Practice the actions of each reinforcement finger(s) on the instrument

# **Course Content**

#### Lecture/Course Content

- 1. Advance root instrumentation
- 2. Alternative fulcrums
- 3. Reinforced finger rest and scaling
- 4. Utilization of modified periodontal instruments (Mini Five, Curvettes, Langer Curets)
- 5. Periodontal dressings
- 6. Sutures
- 7. Examples of common root morphology problems encountered that make exploration difficult. a. Review of root morphology and instruments that will enhance detection of calculus.
- 8. Properly identify the conditions that are the most likely cause of burnished calculus.

- a. Causes, detection, and removal
- 9. Hoes, files, and sickles
- California state board exam criteria and patient selection by listing the criteria for selection of an appropriate clinical board patient.
- 11. Dental hygiene occupational hazards
- 12. Reduction of injury for the dental hygienist through body positioning
- 13. Advantages of finger flexing
- 14. Treatment of patients with moderate to heavy calculus who present with varying degrees of periodontal disease
- 15. Dental implants
- 16. Review of root sensitivity causes
- 17. Instrument grasp
- 18. Mechanics of the instrumentation stroke
- 19. Use of ultrasonic instruments
- 20. Extrinsic stain removal from coronal surfaces

#### Laboratory or Activity Content

- Students are required to continually demonstrate an acceptable level of clinical competency while performing dental hygiene techniques on progressively more difficult cases. There are ongoing correction and teaching demonstrations by the supervising instructors to enable the students to learn correct clinical procedures. There will be prescribed number of patients in each case classification that students will be required to complete. Prior to starting regular clinical work, students are required to pass competency exams in which faculty assess teach student's preparedness to begin treating patients. Students are not allowed to begin treating patients until all competency exams are successfully completed (passed).
- 2. Demonstrating competency in advanced clinical skills will be required to pass this course.
- 3. Successful completion of 2 Mock Boards with appropriate patient

# **Methods of Evaluation**

Which of these methods will students use to demonstrate proficiency in the subject matter of this course? (Check all that apply): Skills demonstrations

Written expression

Methods of Evaluation may include, but are not limited to, the following typical classroom assessment techniques/required assignments (check as many as are deemed appropriate):

Clinical demonstration Essays Group projects Objective exams Oral presentations Projects Quizzes Role playing Skills demonstrations Skill tests Treatment plans

# Instructional Methodology

#### Specify the methods of instruction that may be employed in this course

Computer-aided presentations Collaborative group work Clinical demonstrations Case studies Guest speakers Instructor-guided interpretation and analysis Lecture Small group activities

#### Describe specific examples of the methods the instructor will use:

Case studies of different patient scenarios to determine appropriate instruments are given routinely.

Clinical demonstrations of advanced instrumentation skills, laser therapy, nutritional therapy, study models, intraoral cameras, saliva evaluation for caries prevalence, radiology, local anesthesia, and Mock Boards.

Class activities would include collaborative group work constructing mind maps on difficult sections within a chapter.

Individual PowerPoint presentations on assigned case studies.

Guest speakers from local specialty practices, companies and the dental hygiene components.

Instructor guided discussion and use of terminology on Focus Points listed at the end of each chapter in the Darby textbook. Lecture from both notes and PowerPoints.

Small group activities (breakout sessions) solving given case studies.

# **Representative Course Assignments**

#### Writing Assignments

1. Written case presentation on the case study assigned by the instructor

#### **Critical Thinking Assignments**

1. Determining patient criteria and continuing to develop advanced instrumentation skills in preparation for the Central Regional Dental Testing Service (CRDTS) examination.

#### **Reading Assignments**

- 1. Students may be required to review material from Periodontal Instrumentation (Pattison)
- 2. Students may be required to review material from Clinical Practice of the Dental Hygienist (Wilkins)
- 3. Students may be required to review material from Theory of Periodontal Instrumentation and Techniques (Carranza)

#### **Skills Demonstrations**

1. Mock Boards on 2 qualified CRDTS patients and completion of a Code 4 patient.

# Other assignments (if applicable)

1. Practice of scaling on typodont

# **Outside Assignments**

- **District General Education**
- **A. Natural Sciences**
- **B. Social and Behavioral Sciences**
- **C. Humanities**
- **D. Language and Rationality**
- E. Health and Physical Education/Kinesiology
- F. Ethnic Studies/Gender Studies
- CSU GE-Breadth
- Area A: English Language Communication and Critical Thinking
- Area B: Scientific Inquiry and Quantitative Reasoning
- **Area C: Arts and Humanities**
- Area D: Social Sciences
- Area E: Lifelong Learning and Self-Development
- **Area F: Ethnic Studies**
- CSU Graduation Requirement in U.S. History, Constitution and American Ideals:
- IGETC
- **Area 1: English Communication**
- Area 2A: Mathematical Concepts & Quantitative Reasoning
- **Area 3: Arts and Humanities**
- Area 4: Social and Behavioral Sciences
- Area 5: Physical and Biological Sciences
- Area 6: Languages Other than English (LOTE)

# Textbooks and Lab Manuals Resource Type

Textbook

Description

Nield-Gehrig, Jill S. (2016). Fundamentals of Periodontal Instrumentation (Eighth). Wolters Kluwer/Lippincott Williams & Wilkins.

Resource Type Manual

Description

Central Regional Dental Testing Service (CRDTS) manual (2020).

# **Library Resources**

Assignments requiring library resources None

Primary Minimum Qualification DENTAL TECHNOLOGY

#### Additional local certifications required

All dental hygiene program faculty members must possess a baccalaureate or higher degree in a discipline related field and must have current knowledge of the specific subjects they are teaching and background in appropriate educational methodology. Dentists or dental hygienists who supervise students' clinical procedures must have qualifications which comply with the state dental or dental hygiene practice act. For this class, an instructor must have a license, such as a license to practice dentistry or dental hygiene, which covers the rendering of dental hygiene treatment and administration of local anesthetic.

# **Review and Approval Dates**

**Department Chair** 04/27/2020

**Dean** 04/27/2020

Technical Review 05/13/2020

Curriculum Committee 05/13/2020

Curriculum Committee 12/09/2020

CCCCO MM/DD/YYYY

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DOE/accreditation approval date MM/DD/YYYY