#### DH 81 Course Outline as of Fall 2022

# **CATALOG INFORMATION**

Dept and Nbr: DH 81 Title: COMMUNITY DENTAL HEALTH

Full Title: Community Dental Health

Last Reviewed: 2/7/2022

Units		Course Hours per Week		Nbr of Weeks	<b>Course Hours Total</b>	
Maximum	2.00	Lecture Scheduled	2.00	17.5	Lecture Scheduled	35.00
Minimum	2.00	Lab Scheduled	0	10	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	2.00		Contact Total	35.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 70.00 Total Student Learning Hours: 105.00

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly:

### **Catalog Description:**

Students will learn the principles of public health through classroom and field experience and participate in a community service learning experience. This course is designed to provide an insight into the opportunities for dental hygienists to work in community settings and public health.

# **Prerequisites/Corequisites:**

Course Completion of DH 72

## **Recommended Preparation:**

#### **Limits on Enrollment:**

Acceptance into the program

# **Schedule of Classes Information:**

Description: Students will learn the principles of public health through classroom and field experience and participate in a community service learning experience. This course is designed to provide an insight into the opportunities for dental hygienists to work in community settings and public health. (Grade Only)

Prerequisites/Corequisites: Course Completion of DH 72

Recommended:

Limits on Enrollment: Acceptance into the program

Transfer Credit: CSU;

Repeatability: Two Repeats if Grade was D, F, NC, or NP

# **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

AS Degree: Area Effective: Inactive: CSU GE: Transfer Area Effective: Inactive:

**IGETC:** Transfer Area Effective: Inactive:

**CSU Transfer:** Transferable Effective: Fall 2000 Inactive:

**UC Transfer:** Effective: Inactive:

CID:

# **Certificate/Major Applicable:**

Major Applicable Course

# **COURSE CONTENT**

# **Student Learning Outcomes:**

At the conclusion of this course, the student should be able to:

- 1. Recognize the role of the dental hygienist within a community setting as a health care provider, educator, and consultant, and to provide assistance to community groups and individuals seeking access to public dental services.
- 2. Describe the use of biostatistics in oral epidemiology in the development of community based dental programs.

### **Objectives:**

At the conclusion of this course, the student should be able to:

**Major Learning Outcomes** 

- 1. Define dental public health including the levels of dental preventive care and describe the factors that affect dental public health
- 2. Compare the aspects of private and public dental health models of practice and describe the seven professional roles of the dental hygienist
- 3. Defend the need for prevention modalities in dental public health practice and identify the governmental agencies that impact dental care delivery
- 4. Develop a lesson plan that encompasses individual learning levels and domains for a specific target group
- 5. Compare qualitative and quantitative evaluations using various dental indices as resources for oral health evaluation
- 6. Define oral epidemiology related to evidence-based practice in dental hygiene and apply surveillance data to the planning of strategies to improve oral health
- 7. Describe the various research designs used in oral epidemiology, ethics in research, and the methods used to conduct research studies
- 8. Identify and describe measures of dispersion, measure of central tendency and how they relate to inferential statistics

# **Topics and Scope:**

- I. Dental public health
  - A. concepts of health and dental public health
  - B. dental health care delivery in the private practice setting vs community setting
  - C. seven professional roles of the dental hygienist
- II. Clinical measures used in oral health surveillance
  - A. screening methods
  - 1. primary
  - 2. secondary
  - 3. tertiary

## III. Health disparities

- A. oral health disparities and barriers to healthcare
- 1. lack of providers
- 2. financial
- 3. transportation
- 4. cultural influences
- 5. educational status
- IV. Oral health problems affecting the public and the extent to which they affect the population
  - A. dental caries
  - B. periodontal disease
  - C. oropharyngeal cancer
  - D. oral injuries

# V. Epidemiology

- A. concepts of epidemiology
- 1. epidemiologic triangle
- 2. agent factors
- 3. environmental factors
- 4. host factors
- 5. role of the epidemiologist
- 6. distribution of disease
- B. measures of disease occurrence
- 1. incidence
- 2. prevalence
- 3. morbidity
- 4. mortality
- 5. rate
- 6. epidemic
- 7. endemic
- 8. pandemic
- 9. outbreak
- VI. Influence of epidemiologic on the health of a community
  - A. barriers to health
  - 1. transportation
  - 2. socioeconomic
  - 3. educational
  - 4. cultural

- B. determinants of health
- 1. environmental
- 2. educational level
- 3. health/genetics
- 4. socioeconomic
- 5. cultural

# VII. Major dental indices utilized in dental public health

- A. categories of indices
- 1. characteristics of an ideal index
- 2. four categories of indices
- B. types of indices used in dental public health
- 1. decayed, missing filled teeth/surfaces for permanent teeth (DMFT/S)
- 2. decayed, extraction needed, filled teeth/surface primart teeth (deft/defs)
- 3. periodontal index
- 4. community periodontal index
- 5. root caries index
- 6. Dean's fluorosis index
- 7. plaque index
- 8. gingivitis

# VIII. Scientific research design

- A. define components of research methodology
- 1. research design
- 2. sampling populations
- 3. convenience
- 4. judgement
- 5. systematic
- 6. random
- 7. stratified
- B. observational studies
- 1. prospective (longitudinal) study design
- 2. retrospective (case control) study design
- 3. cross sectional study design
- 4. cohort study design
- C. experimental studies
- 1. single blind design
- 2. double blind design
- 3. randomized control study
- 4. quasi-experimental
- D. describe components of well-designed research in a journal article
- 1. scientific method
- 2. hypothesis testing
- 3. alternate hypothesis
- 4. null hypothesis
- E. combating research bias
- 1. sample size
- 2. randomization of sample
- 3. double vs single blind studies

#### IX. Statistics

A. concepts of statistics and terminology

- 1. measures of central tendency
- 2. mean
- 3. mode
- 4. median
- B. measures of dispersion
- 1. standard deviation
- 2. range
- 3. variance
- 4. correlation coefficients
- 5. probability
- C. parametric tests
  - 1. t-test
  - 2. analysis of variance (ANOVA)
- D. non-parametric tests
- 1. chi-square

# **Assignment:**

- 1. Reading assignments (1-2 chapters per week)
- 2. Quizzes (4-8)
- 3. Exams: midterms (2) and final
- 4. Developing a lesson plan for a target group
- 5. Lesson plan presentation
- 6. PICO question
- 7. Scientific literature review

### Methods of Evaluation/Basis of Grade:

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Scientific literature review; developing a lesson plan for a target group and PICO question

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

None

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Lesson Plan Presentation

**Exams:** All forms of formal testing, other than skill performance exams.

Quizzes, midterm, final exam

Writing 40 - 50%

Problem solving 0 - 0%

Skill Demonstrations 10 - 20%

Exams 30 - 40%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

None		Other Category 0 - 0%
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**Representative Textbooks and Materials:**Dental Public Health and Research. 4th ed. Nathe, Christine. Pearson. 2017
Instructor prepared materials on CANVAS