

**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	Course Hours Total	
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:**

<b>AS Degree:</b>	<b>Area</b>	Effective:	Inactive:
<b>CSU GE:</b>	<b>Transfer Area</b>	Effective:	Inactive:
<b>IGETC:</b>	<b>Transfer Area</b>	Effective:	Inactive:
<b>CSU Transfer:</b>	Transferable	Effective: Fall 2000	Inactive:
<b>UC Transfer:</b>		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

Writing  
40 - 50%

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

None

Problem solving  
0 - 0%

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

Lesson Plan Presentation

Skill Demonstrations  
10 - 20%

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

Quizzes, midterm, final exam

Exams  
30 - 40%

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

None

Other Category  
0 - 0%

**Representative Textbooks and Materials:**

Dental Public Health and Research. 4th ed. Nathe, Christine. Pearson. 2017  
Instructor prepared materials on CANVAS