# **Dental Public Health Sciences (DPHS)**

Course information contained within the Bulletin is accurate at the time of publication in June 2025 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

#### DPHS 5089. Planning and Evaluation of Field Experience in Dental Public Health. 5 to 8 Credit Hours.

The overall goal of this course is to provide students with practical experience in the planning, development and/or conduct of an oral health program/ project/study. This course will require a statement of objectives and planned procedures prior to the field placement in a selected affiliation site. This will be prepared by the student, working in concert with the advisor and field supervisor. The student will also be required to present a formal evaluation report of the field experience to his or her advisor after its completion. The field supervisor will be asked to complete an evaluation form on the resident's performance. This evaluation will then become part of the resident's file, and a permanent record that the field experience was completed satisfactorily.

Repeatability: This course may be repeated for additional credit.

#### DPHS 8001. Foundations of Dental Public Health, 3 Credit Hours.

This course is the dental public health student's introduction to the discipline. It presents a social and historical context for dental public health, and provides a basis for the more detailed examination of other aspects of the discipline which are covered in other courses. Students will learn about the public agencies and professional organizations involved in dental public health activities, and will have the opportunity to compare and contrast the structure of public health dentistry in the U.S. with that in other countries. Recent activities, projects, and publications in dental public health will be discussed. Practitioners in dental public health need to be able to locate information efficiently, to appraise its value, and to use that information in writing and speaking. They need to be confident in their ability to write clearly and to speak assertively in public. This course aims to provide students with the necessary skills and knowledge needed to locate information, judge its quality, and present critical summaries using written and oral communication. The course also allows students to develop confidence in their writing and public speaking.

Repeatability: This course may not be repeated for additional credits.

#### DPHS 8002. Administration in Dental Public Health. 2 Credit Hours.

This course is designed to address the following topics: Models of public organization, administrative decision-making, patterns of administrative communications, role and function of administrative leadership, nature and function of public personnel and fiscal management systems, planning, operating, and evaluating dental public health programs, quality assurance, budgeting, legislative issues and environmental hazards in the dental office.

Repeatability: This course may not be repeated for additional credits.

### DPHS 8003. Epidemiology and Prevention of Oral Diseases. 3 Credit Hours.

This is a comprehensive course in the philosophy, principles, and methods of study in the epidemiology and prevention of oral diseases and their interrelationships between oral and systemic health. Topics related to the epidemiology of oral diseases include measurement techniques, casualty, risk factor identification, study designs, sampling concepts, and the distribution of oral diseases and conditions in populations. The scientific basis for procedures and programs to prevent oral diseases is also examined, with emphasis on public health applications. Topics related to the prevention of oral diseases include water fluoridation, other fluoride programs, pit-and-fissure sealants, diet, nutrition, oral hygiene, chemotherapeutics, and screening programs.

Repeatability: This course may not be repeated for additional credits.

#### DPHS 8005. Provision and Financing of Dental Public Health. 2 Credit Hours.

This course will cover topics such as: Overview of fee-for-service private practice and salaried practice, detailed examination of traditional insurance in general health and dental plans, managed care in general and dental plans, HMOs, Medicaid, evolution of current plans and some projections into the future developments, types of dental personnel and social, economic, and political factors determining their supply and deployment.

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

## DPHS 8007. Analysis of Oral Dental Health Data. 1 Credit Hour.

The overall goal of this course is to provide students with a practical knowledge and understanding of the design and conduct of oral epidemiological research projects, data analysis, interpretation, and reporting of the results. The students will apply the knowledge learned from foundation courses to define research questions and hypotheses, select study design, develop or select measurement tools, collect and manage data, conduct statistical analysis, and report the findings. The course will focus on analysis of oral health related measurements and the statistical analysis of dental data which are usually clustered because of the presence of multiple sites within a mouth. Analysis of complex health data (e.g., multiple and correlated data such as dental caries) and data from complex sample design will also be discussed. Ethical conduct of research will be reviewed and discussed.

Repeatability: This course may be repeated for a total of 2 credit.

### DPHS 8009. Applied Statistical Analysis of Oral Health Data. 1 Credit Hour.

The overall goal of this course is to provide students with practical knowledge and understanding of dental caries data and opportunities to conduct oral epidemiological research projects using dental caries data. Students will learn about various caries measurement systems and foundational analytic skills to examine properties of data elements and develop summary measures. In particular, the course will cover essential statistical theories and analytic approaches for correlated count data (e.g., dental caries counts clustered within a mouth). Analysis of complex sample data will be also discussed in order to make inferences about a target population.

Repeatability: This course may be repeated for additional credit.

#### DPHS 9991. Research in Dental Public Health. 1 to 9 Credit Hour.

The overall goal of this course is provide students with the knowledge and understanding related to the principles and methods used in epidemiologic study of dental diseases. Philosophy of the science, study designs, strengths and limitations of different designs. IRB protocol development, consent, design, methods, conduct and analysis of a research project will be developed within this course.

Repeatability: This course may be repeated for additional credit.