Preventive and Community Dentistry

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Graduate degree: M.S. in dental public health
Faculty: https://www.dentistry.uiowa.edu/preventive-faculty
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The Department of Preventive and Community Dentistry educates future and practicing dental and oral health professionals, preparing them to understand and recognize:
• conditions that compromise patients;
• social, cultural, community, and political influences on dental practice;
• principles of preventive dentistry for individuals, groups, and communities; and
• considerations for preventing and treating oral disease in geriatric and special needs patients.

In addition to offering educational programs, the department provides patient care at the College of Dentistry and in a variety of off-campus settings. It also is home to research that advances dental public health. The department offers a Master of Science degree and the Certificate in Geriatric and Special Needs Dentistry.

D.D.S. Student Training

Predoctoral training in preventive, community, and geriatric dentistry is designed to increase Doctor of Dental Surgery students' awareness of preventive dental practices, aspects of dental practices affected by community factors, and care of compromised adult patients.

Community dentistry programs give students opportunities to interact with health care teams and the public in Iowa and around the world. The department conducts off-site community programs statewide, nationwide, and worldwide. It also operates the Geriatric and Special Needs Clinic, which is housed in the Dental Science Building.

Using the community dentistry programs as the classroom, D.D.S. students observe and participate in a variety of activities that nurture their awareness of the societal obligations they must assume in order to become effective practitioners.

Preventive and Community Dentistry Courses

PCD:8116 Fundamentals of Clinical Dentistry 1 s.h.
Identification of health and disease in the mouth; practical methods of disease control, philosophy of preventive dentistry; patient assessment, clinical diagnosis.

PCD:8117 Cariology and Preventive Therapies 2 s.h.
Principles of research design; introduction to microbiology and immunology; principles of oral microbiology with an emphasis on plaque development; microbiology of caries; coronal and root caries disease processes; dental caries epidemiology; roles of saliva and diet in dental health and disease; radiographic interpretation and clinical diagnosis; dental fluorosis; preventive dentistry treatment planning. Prerequisites: PCD:8116.

PCD:8118 Preventive Dentistry Assessment and Patient Care 3 s.h.
Patient oral assessment, communication, patient management skills; preventive dentistry risk assessment, oral hygiene instruction for collegiate recall patients; skills in instrumentation for detection, removal of calculus deposits. Prerequisites: PCD:8116 and PCD:8117.

PCD:8119 Behavioral Science I, Interprofessional Education, and Ethics 2 s.h.
Introduction to patient-centered care, interpersonal and professional communication with patient, information exchange, preventive treatment plan formulation in patient encounters, and ethics.

PCD:8120 Foundations for Critical Thinking I 2 s.h.
Fundamentals of evidence-based dentistry and treatment planning, integrating information taught concurrently in the dental curriculum.

PCD:8218 Foundations for Critical Thinking II 1 s.h.
Continuation of PCD:8120; evidence-based dentistry, critical thinking and treatment planning sessions; online and small group sessions. Prerequisites: PCD:8120.

PCD:8219 Behavioral Science II and Interprofessional Education 2 s.h.
Continuation of PCD:8119; assessing patient understanding of practices for improving/maintaining oral health; overview of patient challenges to effective communication; application of behavioral science principles in dentistry and behavior theories. Prerequisites: PCD:8119.

PCD:8245 Clinical Preventive Dentistry 0,2 s.h.
Experience providing complete prophylaxis and preventive services for college patients; application of nutrition principles and communication skills in a clinic setting. Prerequisites: PCD:8118.

PCD:8319 Behavioral Science III 1 s.h.
Continuation of PCD:8219; standardized patient exercises with chairside feedback and evaluation of communication skills; participation in small group discussions regarding application of communication skills and behavioral science principles in patient encounters.

PCD:8355 Introduction to Geriatric Dentistry 2 s.h.
Biological, psychological, and social aspects of aging; normal aging and disease processes associated with aging; pathological changes that affect oral health treatment of dental diseases and patient management. Requirements: D.D.S. enrollment or completion of dental hygiene program. Same as ASP:8355.
PCD:8360 The Practice of Dentistry in the Community I 1-2 s.h.
Issues related to the role of the dental professional at a local and state level, including dental public health, health literacy, cultural competency, and forensic dentistry; the role of the state dental director.

PCD:8361 The Practice of Dentistry in the Community II 1-2 s.h.
Factors that affect the practice of dentistry and the dental profession including health care systems in the U.S. and abroad, Medicaid/Medicare, health/dental insurance, health care delivery systems, malpractice, role of the Iowa Dental Board, dental workforce, and quality of care.

PCD:8370 Application of Critical Thinking 1 s.h.
Continuation of PCD:8219; evidence-based dentistry, critical thinking, treatment planning sessions; online and small group sessions.

PCD:8485 Broadlawns Medical Center arr.
Dental care to low-income patients in a metropolitan hospital-based clinic; community-related assignments; student team experience in Des Moines.

PCD:8488 St. Lukes Dental Health Center arr.
Experience providing clinical and outreach services for low-income children and adults with developmental disabilities at St. Luke's Hospital, Cedar Rapids; operative and behavioral dental problems, hospital protocol, special needs of low-socioeconomic clients.

PCD:8489 Geriatrics and Special Needs Program arr.
Experience in the Delta Dental of Iowa Geriatric and Special Needs Clinic and the Geriatric Mobile Dental Unit; comprehensive care for medically, physically, intellectually, and/or cognitively compromised adults, functionally dependent elderly nursing home residents with portable dental equipment, and other underserved populations.

PCD:8494 Oral Health Field Clinic 5 s.h.
Extramural experiences developed according to student needs, extramural opportunities.

PCD:8498 International Outreach Program 0 s.h.
Participation in a two-week mission outreach program in Cambodia or Guatemala; requires successful completion of application process; for entering fourth-year dental students.

PCD:8499 International Exchange Program 10 s.h.
International extramural program; students learn about dentistry in an international dental program.

PCD:8500 Dental Student Research Honors Program arr.
Experience in conducting research. Requirements: D.D.S. enrollment and approval of mentor and program director.

Dental Public Health Courses

DPH:5000 Introduction to Dental Public Health 0,2 s.h.
Science, philosophy, practice of dental public health.

DPH:5001 Literature Review Methods: Dental Public Health 0,2 s.h.
Concepts and process of literature review, particularly in area of student's interest.

DPH:5005 Administration of Public Dental Programs 0,2 s.h.
Application of general management concepts; practical aspects of planning, financing, staffing, implementing, operating, evaluating dental public health programs at federal, state, local levels.

DPH:5006 Preventive Programs in Dental Public Health 0,2 s.h.
Prevention and control methods for major dental conditions, primarily dental caries and periodontal diseases; clinical efficacy and cost-effectiveness; development of comprehensive preventive oral health plan for a community.

DPH:5008 Field Experience in Dental Public Health arr.
Arranged with public and voluntary health agencies according to students' and agencies' needs.

DPH:5009 Advanced Field Experience in Dental Public Health 1-3 s.h.
Opportunity to research, develop, and implement programmatic objectives with local, state, national, and/or federal agencies and organizations on an issue that is both relevant to the student and the agency; may require off-site visits to agencies or organizations. Prerequisites: DPH:5008.

DPH:5014 Dental Care Policy and Financing 0,2 s.h.
Dental financing and policy issues: payment mechanisms for health care service providers, third-party prepayment plans, salaried and public-financed programs, Medicaid and Medicare programs, dental insurance systems, and care of the underserved.

DPH:5016 Introduction to Statistical Computing arr.
Use of statistical packages on a personal computer for data management and analysis. Offered summer session.

DPH:5031 Geriatric Care 0,2 s.h.
Aging demographics; effects of aging on the human body with emphasis on the masticatory system; diseases commonly found among the elderly; and dental care for the elderly in different settings.

DPH:6002 Research Protocol Seminar 0,2 s.h.
Development of a master's thesis protocol; identification of thesis topic, review of relevant literature, development of research methods, writing.

DPH:6003 Independent Study: Dental Public Health 1-3 s.h.

DPH:6004 Principles of Oral Epidemiology 0-3 s.h.
Interpretation of scientific literature, with respect to the distribution and determinants of oral diseases and conditions, including caries, periodontal diseases, tooth loss, oral cancer, and more.

Protocol preparation; data collection, analysis, organization; writing, defense of research.

DPH:6017 Teaching Methods and Evaluation arr.
Philosophies of dental education, teaching methodologies, evaluation; focus on learning to write educational objectives, writing and analyzing exam items.

DPH:6018 Clinical Teaching Practicum: Preventive Dentistry 0-3 s.h.
Teaching experience in preventive dentistry clinic setting with first-year dental students; outcomes focused on methods in clinical teaching, evaluation, and remediation.