

# School of Dentistry

## Welcome to the IU School of Dentistry!

### Mission

IUSD is a member of the American Dental Education Association and is fully accredited by the Commission on Dental Accreditation of the American Dental Association.

Its mission is to promote optimal oral and general health of Indiana citizens and others through educational, research, and service programs. The school is committed to recruiting quality students and preparing them to become highly competent, ethical, and socially responsible practitioners of dentistry.

The school also sees as part of its responsibilities the creation of opportunities for career-long learning for its graduates and other dental professionals through continuing education programs.

The school strives to maintain its role as a vital and productive member of Indiana University's scholarly community. It is dedicated to increasing the knowledge base in all areas related to oral health through an extensive research program that includes the participation of both faculty and students.

The school provides a broad spectrum of patient services as a principal means of furnishing clinical educational opportunities for students. Nearly 90,000 dental appointments are scheduled annually for a population of about 22,000 dental patients. Treatment is provided in the school's clinics as well as at patient care facilities at IU's Riley Hospital Outpatient Center, University and Wishard Memorial hospitals, and two community health centers.

The dental school continually emphasizes to its students the importance of community service. Through collaborative partnerships with schools, health care centers, and other facilities in central Indiana, the school seeks to expose students to a variety of service-learning experiences, particularly those involving special population groups.

Students also are taught that part of their ongoing responsibilities as health care providers in the community will be to increase public awareness of the critical role oral health plays in one's overall well-being.

## Overview

### History

Indiana University School of Dentistry (IUSD) is one of the oldest dental schools in the nation. It was established as the Indiana Dental College in 1879 and became part of Indiana University in 1925. In 1933, IU built a facility to house the school at its current site on what is now known as the Indiana University-Purdue University Indianapolis campus. It is the only dental school in the Hoosier state.

The school's reputation for excellence took firm root in the 1940s, when several key teachers and researchers began long and prolific careers as members of the dental faculty. It was during this era, for example, that three IU scientists, including dental professor Joseph Muhler, created the first

stannous fluoride formula that became the active decay-preventing agent in Crest toothpaste.

Dr. Muhler and other pioneering teachers at the dental school contributed a body of groundbreaking work that drew worldwide attention to Indiana University, and each left a legacy of knowledge that helped build the foundation for contemporary dental science.

Currently, more than 350 faculty members contribute to the dental school's teaching and research programs, including 115 in full-time positions. About 40,000 square feet of space divided into more than a dozen facilities is now devoted to dental research opportunities at IU, including the Oral Health Research Institute, whose researchers have gained prominence for their studies of such subjects as fluoride and dental caries prevention.

More than 12,000 alumni of the school pursue a variety of careers in private practice, education, research, and public health throughout the United States and in more than 30 other countries.

Last updated: November 2011.

## Accreditation & Licenses

The Indiana University School of Dentistry (IUSD) is a member of the American Dental Education Association and is fully accredited by the Commission on Dental Accreditation of the American Dental Association.

## Contact Information

[Indiana University School of Dentistry](http://www.iusd.iupui.edu)

Dental School (DS)  
1121 W. Michigan Street  
Indianapolis, IN 46202  
(317) 274-8173  
[www.iusd.iupui.edu](http://www.iusd.iupui.edu)

### Contact Information

Persons with an interest in applying to or learning more about any of the school's programs should access a copy of the School of Dentistry Bulletin for a full account of the school's rules, policies, fees, curricula, courses, and other matters (<http://www.indiana.edu/~bulletin/iu.dentistry/2009-2011>).

Requests for information should be directed to the following offices:

#### For the A.S.D.H. and D.D.S. degree programs:

Student Records and Admissions Office  
Indiana University School of Dentistry  
1121 West Michigan Street  
Indianapolis, IN 46202-5186  
Telephone: (317) 274-8173  
E-mail: [ds-stdnt@iupui.edu](mailto:ds-stdnt@iupui.edu)  
<http://www.iusd.iupui.edu/prospective-students/admissions/>

#### For the Certificate in Dental Assisting:

Division of Dental Assisting  
Department of Periodontics and Allied Dental Programs  
Indiana University School of Dentistry  
1121 West Michigan Street  
Indianapolis, IN 46202-5186  
Telephone: (317) 274-4407  
<http://www.iusd.iupui.edu/prospective-students/admissions/>

**For the BS in Public Health Dental Hygiene degree:**  
 Division of Dental Assisting  
 Department of Periodontics and Allied Dental Programs  
 Indiana University School of Dentistry  
 1121 West Michigan Street  
 Indianapolis, IN 46202-5186  
 Telephone: (317) 274-7801  
<http://www.iusd.iupui.edu/prospective-students/admissions/>

**For the M.S.D., M.S., and Ph.D. degree programs:**  
 Office of Graduate Education  
 Indiana University School of Dentistry  
 1121 West Michigan Street  
 Indianapolis, IN 46202-5186  
 Telephone: (317) 274-5348  
 E-mail: [ds-grad@iupui.edu](mailto:ds-grad@iupui.edu)  
<http://www.iusd.iupui.edu/departments/education/graduate-education/graduate-programs/>

**For the General Practice Residency or the Oral and Maxillofacial Surgery Residency:**  
 Coordinator  
 GPR and Oral and Maxillofacial Surgery Programs  
 Department of Oral Surgery and Hospital Dentistry  
 1050 Wishard Blvd., Room 4201  
 Indianapolis, IN 46202  
 Telephone: (317) 278-3662  
<http://www.iusd.iupui.edu/departments/education/graduate-education/graduate-programs/>

## Admissions

### Dental Assisting and Dental Hygiene Admissions Requirements

The Indianapolis campus offers programs in dental assisting and dental hygiene; both are housed in the school's Department of Periodontics and Allied Dental Programs.

### DDS Admissions Requirements

Detailed DDS admissions requirements are available on the IUSD Website: <http://www.iusd.iupui.edu/prospective-students/admissions/>

### Graduate Admissions Requirements

Detailed MSD and PhD Admissions Requirements are available on the IUSD Website: <http://www.iusd.iupui.edu/departments/education/graduate-education/graduate-programs/>

## Dental Hygiene Programs Requirements

### Associate of Science (A.S.) Admission Requirements

Required prerequisite courses may be taken at any accredited college or university if they are listed as approved courses by the Student Records and Admissions Office at the Indiana University School of Dentistry (see the section of this Web site entitled For Further Information for the address).

A listing of currently approved courses can also be accessed on the School of Dentistry website under [Prerequisites for Pre-Dental and Pre-Hygiene Students](#). They include one semester each of English composition, chemistry with laboratory, human anatomy, human physiology, microbiology with laboratory,

psychology, sociology, and public speaking, and two semester courses in arts and humanities.

Remedial courses may not be used to fulfill this requirement. All applicants must maintain a minimum cumulative college grade point average of 2.0 (on a 4.0 scale) and achieve a minimum course grade of 2.0 (on a 4.0 scale) in all prerequisite courses to be considered for admission to the program. In addition, applicants must earn a 2.7 grade point average in the combined prerequisite science courses (inorganic chemistry, microbiology, human anatomy, and human physiology).

Please note that if prerequisite courses are retaken for an improved grade, all course grades will be included in the computed grade point averages. Courses taken at institutions other than Indiana University must show a grade of C or above to be accepted as transfer credit by Indiana University. All prerequisite courses listed above must be completed by the end of the spring semester of the year in which students wish to enter the program.

Required science courses must have been completed within the past seven years. Questions about course work that does not meet these time limits should be directed to the Student Records and Admissions Office at IUSD.

All candidates applying for admission must provide documentation that they have recently completed the prescribed number of hours of observation of a practicing dental hygienist in at least two different practice settings. They must also submit a personal statement. Specific instructions for documenting observations and the personal statement are available at the School of Dentistry website under [Dental Hygiene Admission Criteria](#) or from the Student Records and Admissions Office.

Each eligible candidate is required to either attend the In-house Dental Hygiene Candidates' Orientation or complete the online orientation. Registration forms indicating orientation preference must be received by the Student Records and Admissions Office.

All applications and supporting materials are to be submitted by February 1. Applicants who have previously applied must submit a new application when reapplying. Applications to the IUSD dental hygiene program may be obtained by contacting the dental school's Student Records and Admissions Office or from the Web site. Requirements and forms for admission to the IUSD dental hygiene program are specific to this program only and are not acceptable for admission to other dental hygiene programs in the state.

Applications for admission to any other Indiana dental hygiene program must be directed to those programs and follow their prescribed procedures. (See the section of this Web site entitled For Further Information for a list of dental hygiene programs offered on other campuses.) All potential applicants are advised to consult the School of Dentistry's Student Records and Admissions Office or Web site for updates or changes in dental hygiene admissions policies that may occur after publication of this document.

Class size is limited, and there are more qualified applicants than can be accepted each year. Applicants are encouraged to consult with the Student Records and

Admissions Office or the program director for pre-dental hygiene counseling. Selections are made on an individual basis, upon appraisal of the applicant's established record and potential for development.

Potential applicants are advised to review the list of minimum skill standards for admission and retention in the dental hygiene profession. This document is provided on the Web site and from the school's Student Records and Admissions Office. In addition to these standards, it is necessary that students enrolled in the dental hygiene program enter with basic computer literacy sufficient to allow them to participate in instruction involving computer-based course work, Internet searching, basic word processing, and e-mail applications.

### **Bachelor of Science (B.S.) Admission Requirements**

Prerequisites to the public health dental hygiene program include completion of 90 undergraduate semester hours, graduation from an accredited dental hygiene program, satisfactory completion of the National Board Dental Hygiene Examination, and current licensure as a dental hygienist.

Accepted students are expected to have basic computer literacy sufficient to participate in Web-based instruction, computer word processing, and e-mail communication. An application to the program may be obtained by addressing communications to Director, Dental Hygiene Program, Indiana University School of Dentistry, 1121 West Michigan Street, Indianapolis, IN 46202-5186.

Applications may be received at any time during the academic year, but the completed application must be submitted to the program director at least 60 days prior to the first semester in which the applicant wishes to enroll. Completion of all application requirements and an interview with the program director or admissions committee is required before acceptance into the program can be considered. Upon acceptance, each student must complete a curriculum plan to be approved by the program director before enrollment in required courses.

Students in the public health dental hygiene program must complete a total of 32 semester hours of course work, including the following courses that comprise the required core curriculum. In addition to the core courses, students must complete approved elective courses in a selected focus area (e.g., behavioral sciences, education, or basic sciences) to fulfill the 32 semester hour completion requirement of the bachelor's degree.

### **Dental Assisting Requirements Admission Requirements (Campus Program)**

1. Applying to the dental assisting program on the Indianapolis campus is a two-step process involving both the IUPUI Office of Admissions and the IU School of Dentistry Division of Dental Assisting. Applicants must first file an admission application with the IUPUI Office of Admissions and be admitted to the university as an undergraduate student. Qualified applicants will be notified of their university admittance by IUPUI. The IUPUI Office of Admissions' application packet will also contain an application for admission to the dental school's dental assisting program. Applicants will submit this

application to the Division of Dental Assisting. All IUPUI application materials are available through the IUPUI Enrollment Center ([www.enroll.iupui.edu](http://www.enroll.iupui.edu); 317-274-4591).

2. Applications must include official transcripts from all high school and all post-secondary schools attended, including colleges, universities, and vocational institutions. The transcripts of applicants who are currently enrolled in their senior year of high school should include grades from fall semester. Graduates of GED programs must submit a copy of their GED certificate and scores. Official transcripts showing all academic work completed must be submitted before final acceptance to the dental assisting program.
3. Applicants must have an overall minimum cumulative grade point average of 2.0 (on a 4.0 scale) as well as a minimum of 2.0 in science and English courses taken in high school and college.
4. Applicants must observe a chairside dental assistant in a dental office for a minimum of eight hours. The IUSD Dental Assisting Verification of Dental Office Observation Form is to be signed by the dentist and submitted to the Dental Assisting Program by the application deadline.
5. Individuals for whom English is a secondary language must demonstrate proficiency in English before being admitted to IUPUI. Several testing options are available. For more information, see the Undergraduate English Language Requirements on the IUPUI Office of International Affairs Web site (<http://iapply.iupui.edu/undergraduate/english>). Tests results will be used as part of the dental assisting admissions review, and the dental assisting admissions committee may also require an interview or writing exercise to determine the applicant's English skills.

The application deadline for the campus program is 5 p.m. on June 1 prior to the fall semester the applicant wishes to enter the program. Applicants should send the completed application (photo optional), observation form, and all official transcripts to the Dental Assisting Program, Indiana University School of Dentistry, 1121 West Michigan Street, DS 430, Indianapolis, IN 46202-5186. Incomplete applications will not be considered.

All potential applicants are advised to consult the School of Dentistry's Dental Assisting Program Web site for updates or changes in dental assisting admissions policies that may occur after publication of this document.

### **Admission Requirements (Distance-Learning Program)**

Applicants should follow admission requirements 1 through 5 for the [campus program](#) as well as requirements 6 through 8 listed below:

- 6 Applicants must identify a sponsoring general practice dentist holding an active Indiana dental license who can provide clinical training in the field of general dentistry.
- 6 Applicants must meet the university's technology requirements:
  - Office XP Software

- Internet access at Explorer IE6 or Higher DSL or cable modem access is required)
- 6 Applicants must be able to travel to the Indiana University School of Dentistry when necessary (typically, one Saturday a month throughout the school year).

The application deadline for the distance-learning program is 5 p.m. on June 1 prior to the fall semester the applicant wishes to enter the program. Applicants should send the completed application (photo optional), observation form, and all official transcripts to the Dental Assisting Program, Indiana University School of Dentistry, 1121 W. Michigan Street, DS 430, Indianapolis, IN 46202-5186. Incomplete applications will not be considered.

All potential applicants are advised to consult the School of Dentistry's Dental Assisting Program Web site for updates or changes in dental assisting admissions policies that may occur after publication of this document.

## Courses

The following is a listing of all of the courses offered for the School of Dentistry's undergraduate degree and certificate programs.

### Associate of Science Degree

**DHYG-E 351 Advanced Dental Materials for Dental Auxiliaries (2 cr.)** Lecture and laboratory course designed to teach additional concepts of dental materials and their use in intraoral techniques. Included is instruction in dental auxiliary utilization principles and the manipulation of dental materials used in delegated intraoral functions.

**DHYG-H 101 Dental Hygiene Freshman Experience (1 cr.)**

**DHYG-H 204 Periodontics (1 cr.)** Study of the normal periodontium at the clinical, histologic, and biochemical levels; procedures involved in carrying out a comprehensive periodontal examination and performing a periodontal prophylaxis.

**DHYG-H 205 Medical and Dental Emergencies (1 cr.)** A study in emergency situations in the dental office, including predisposing factors and drugs, and treatment to include the support of the cardiopulmonary system.

**DHYG-H 206 General Pathology I (1 cr.)** H206 General Pathology I (1 cr.) Mechanisms of disease at the cellular, organ, and systemic levels with special references to specific disease processes; includes general concepts, terminology, and pathology of organ systems.

**DHYG-H 207 General Pathology II (1 cr.)** Mechanisms of disease at the cellular, organ, and systemic levels with special references to specific disease processes; includes general concepts, terminology, and pathology of organ systems.

**DHYG-H 211 Head & Neck Anatomy (2 cr.)** Head & Neck Anatomy

**DHYG-H 214 Oral Anatomy (3 cr.)** A study of the morphology, structure, and function of deciduous and permanent teeth and surrounding tissues, also including osteology of the maxilla and mandible, nerve and

vascular supply of teeth, and muscles of mastication, with reinforcing laboratory procedures and clinical application.

**DHYG-H 215 Pharmacology and Therapeutics: First Year (2 cr.)** Actions and uses of drugs and theory of anesthetics; emphasis on drugs used in dentistry.

**DHYG-H 216 Chemistry and Nutrition: First Year (3 cr.)** Specific ideas in chemistry are correlated with working principles in dentistry. Previous knowledge of chemistry assumed.

**DHYG-H 217 Preventive Dentistry: Second Year (1 cr.)** Detection and prevention of dental disease; included is a study of dental surveys, dental indices, and fluoride therapy.

**DHYG-H 218 Fundamentals of Dental Hygiene: First Year (4 cr.)** An introduction to the dental and dental hygiene profession, including the basic didactic and laboratory/clinic practice for the performance of dental hygiene services.

**DHYG-H 219 Clinical Practice I (4 cr.)** Performance of dental hygiene services in various clinical settings. Included is didactic instruction and application of dental hygiene procedures for providing patient care and an introduction to oral diagnosis.

**DHYG-H 221 Clinical Dental Hygiene Procedures (1-3 cr.)** Clinical assignment for instruction and experience in performing dental hygiene services.

**DHYG-H 250 LOCAL ANESTHESIA AND PAIN CONTROL (1 cr.)** Local Anesthesia and Pain Control

**DHYG-H 252 Introduction to Evidence-Based Dental Hygiene Care (1 cr.)** Foundational knowledge to implement evidence-based decision-making strategies in the provision of patient/client care. It includes basic knowledge and skills related to research terminology, library and computer-based information retrieval systems, approaches to reviewing and evaluating scientific literature, and dental indices used in the description of oral health and disease.

**DHYG-H 301 Clinical Practice II (5 cr.)** Continued performance of dental hygiene services in various clinical settings. Included are didactic instruction and clinical application of dental hygiene services for providing patient care.

**DHYG-H 302 Clinical Practice III (5 cr.)** Continued performance of dental hygiene services in various clinical settings. Included are didactic instruction and clinical application of dental hygiene services for providing patient care.

**DHYG-H 303 Radiology (1 cr.)** Principles of radiation production, placement of intraoral film, proper exposure and processing of film, radiation safety, and interpretation of radiographs.

**DHYG-H 304 Oral Pathology: Second Year (2 cr.)** Developmental abnormalities and acquired disorders of teeth and surrounding structure.

**DHYG-H 305 Radiology Clinic I (1 cr.)** Clinical application of intraoral and extraoral radiographs.

**DHYG-H 306 Radiology Clinic II (1 cr.)** Clinical application of intraoral and extraoral radiographs.

**DHYG-H 307 Radiology Clinic III (1 cr.)** Clinical application of intraoral and extraoral radiographs.

**DHYG-H 308 Dental Materials: First Year (2 cr.)** Composition and physical and chemical properties of materials used in dentistry.

**DHYG-H 311 Dental Health Education (3 cr.)** An introduction to basic communication and motivation skills, instructional objectives, learning theory, evaluation of educational materials, and special needs patients.

**DHYG-H 321 Periodontics (1-2 cr.)** A study of periodontal disease, including the anatomy, classification, etiology, treatment, and relationship to systemic conditions.

**DHYG-H 344 Senior Hygiene Seminar (2 cr.)** Ethics, jurisprudence, and practice management concepts, including a study of state practice acts, dental hygiene employment opportunities, recall systems, and current trends in the dental hygiene profession.

**DHYG-H 347 Community Dental Health (4 cr.)** Principles and practice of program planning, implementation, and evaluation for community and school dental health programs.

### **Bachelor of Science Degree**

Statistics: Recommended courses include STAT 301 Elementary Statistical Methods (3 cr.) or PSY B305 Statistics (3 cr.)

**STAT 301 Elementary Statistical Methods (3 cr.)** P: Must enroll in lab. A basic introductory statistics course with applications shown to various fields and emphasis placed on assumptions, applicability, and interpretations of various statistical techniques. Subject matter includes frequency distribution, descriptive statistics, elementary probability, normal distribution, applications, sampling distribution, estimation, hypothesis testing, and linear regression.

**PSY-B 305 Statistics (3 cr.)** P: PSY B104 Psychology as a Social Science or PSY B105 Psychology as a Biological Science and 3 credits of math that carry School of Science credit. Introduction to basic statistical concepts; descriptive statistics and inferential statistics.

**DHYG-H 402 Practicum in Dental Hygiene Education (4 cr.)** P: H403, Z477. Structured practical experience in planning, supervising, coordinating, and evaluating instruction in an educational setting. Emphasis on faculty roles and responsibilities.

**DHYG-H 403 Advanced Community Dental Hygiene (4 cr.)** Public health principles including a study of the health care delivery system and preventive public health care at the community level.

**DHYG-H 405 Advanced Dental Science (3 cr.)** Review of current literature related to periodontics, oral pathology, preventive dentistry, and the current practices of dental hygiene.

**DHYG-H 406 Educational Methodology in Health Sciences (1-3 cr.)** The purpose of this course is to assist potential educators in the health sciences to understand

current theories, concepts, and methodologies in professional health science education. Students will learn to apply effective educational strategies to match learners' needs in didactic, laboratory, and clinical settings. This course will use a variety of delivery systems, including an on-line component.

**DHYG-H 407 Instructional Media and Technology in Health Science Education (1-3 cr.)** The purpose of this course is to examine the utilization of a variety of instructional technologies that can be used in educational settings for patients, students, and practitioners. Various technologies will be analyzed for appropriateness of use, strengths, and weaknesses. A variety of delivery mechanisms will be used, including an on-line component.

### **Dental Assisting Certificate**

**DAST-A 110 Oral Histology and Embryology (1 cr.)** Development, structure, and function of cells and tissues of the teeth and periodontium; embryologic development of the face, palate, and teeth.

**DAST-A 111 Oral Pathology, Physiology, Anatomy I (2 cr.)** A111 is an overview of the structures, functions, and selected diseases of the human body, including basic cells, tissues, organs, and organ systems. A113 is an introduction to diseases of the oral cavity and its related structures.

**DAST-A 112 Dental Therapeutics and Medical Emergencies (2 cr.)** This course will present the pharmacology of medications that are commonly used by the physician and dentist and the diseases and indications for which these drugs are prescribed. Also, the class will review the systemic diseases and adverse reactions to dental treatment that can result in a medical emergency in the dental office and the armamentarium, medications, and procedures for treating these emergencies.

**DAST-A 113 Oral Pathology, Physiology, Anatomy II (1 cr.)** This course is an introduction to diseases of the oral cavity and its related structures.

**DAST-A 114 Oral Anatomy (3 cr.)** A study of the morphology, structure, and function of deciduous and permanent teeth and surrounding tissues, also including osteology of the maxilla and mandible, nerve and vascular supply of teeth, and muscles of mastication, with reinforcing laboratory procedures and clinical application.

**DAST-A 121 Microbiology and Asepsis Technique (1 cr.)** A study of microbial types, oral microbiology, bloodborne diseases, and infection control including procedures of instrument cleaning and sterilization, surface disinfection, use of protective barriers, waste management, and hazardous materials management.

**DAST-A 131 Dental Materials I (2 cr.)** Lecture and laboratory courses designed to familiarize the student with the basic mechanical, physical, and chemical properties of dental materials. The role of the assistant in selection, manipulation, and biological considerations of dental materials is stressed.

**DAST-A 132 Dental Materials II (2 cr.)** Lecture and laboratory courses designed to familiarize the student with the basic mechanical, physical, and chemical properties of dental materials. The role of the assistant in selection,

manipulation, and biological considerations of dental materials is stressed.

**DAST-A 141 Preventive Dentistry and Nutrition (2 cr.)**

Etiology of prevalent oral diseases and their preventions with particular emphasis on plaque, plaque control, and fluorides. The effects of major nutrients on the physiologic body processes; applied nutrition in dental caries and periodontal disease. Clinical and laboratory experiences.

**DAST-A 151 Radiology Clinic I (2 cr.)** The principles of radiation production, theories and techniques of radiographic imaging, film processing and mounting, radiation safety, and radiographic interpretation are studied in this didactic and preclinical course.

**DAST-A 152 Radiology Clinic II (1 cr.)** Clinical experience in the placing, exposing, processing, evaluating, and mounting of intraoral and extroral dental radiographs. Practical application of radiation safety measures is required in the clinical setting.

**DAST-A 162 Written and Oral Communication (2 cr.)**

Instruction and practice in gathering and organizing material for written and oral presentation. Individual and group projects in communication, including table clinics, posters, professional articles for publication, telephone techniques, and resumes.

**DAST-A 171 Clinical Science I (4 cr.)** A core course in dental nomenclature; the role of the assistant as a member of dental health team in general dentistry and dental specialties to include charting the mouth, identification and utilization of instruments and equipment, principles of dental procedures, instrument transfer, isolation techniques, and asepsis procedures.

**DAST-A 172 Clinical Science II (4 cr.)** Clinical chairside experience, including an extramural assignment; allows for refining of student skills. A seminar provides students opportunities to share experiences.

**DAST-A 182 Practice Management, Ethics, and Jurisprudence (2 cr.)** A course designed to emphasize the role of the dental assistant in the management of a dental office through reception procedures, appointment control, record keeping, purchasing, third-party reimbursement, financial systems, and inventory control. Also, the legal and ethical aspects of dentistry are discussed.

**DAST-A 190 Expanded Restorative Dentistry (3 cr.)** Lecture, laboratory, and clinical course designed to teach more extensively certain concepts of dental materials and their use in intraoral techniques. The principles of dental auxiliary utilization and the manipulation and placement of dental materials used in delegated intraoral functions are taught.

**DAST-A 300 Special Topics in Dental Education (1 cr.)**

P: Chairperson's permission and admission to dental assisting, dental hygiene, or dental laboratory technology program. An advanced course for dental education majors. Supervised reading or projects on approved topics in dentistry. Hours, subject matter, and evaluation to be determined by faculty.

**Dental Auxiliary Education**

**DAE-E 351 Advanced Dental Materials Technology for Auxiliary (2 cr.)**

**Graduate Courses**

**DENT-G 901 Advanced Research (Arr. cr.)**

**DENT-R 965 Advanced Clinical Prosthodontics (0.5-6 cr.)**

**Dental Hygiene Core Curriculum**

**PREDENTAL HYGIENE**

(exact course sequencing may vary depending on course schedules and individual pace of enrollment)

- English Composition
- Sociology
- Arts and Humanities
- Chemistry with Laboratory
- Human Anatomy
- Arts and Humanities
- Public Speaking
- Psychology
- Human Physiology
- Microbiology with Laboratory

**DENTAL HYGIENE (FIRST YEAR)**

**First Semester**

- DHYG-H 204 Periodontics
- DHYG-H 206 General Pathology I
- DHGY-H 211 Head and Neck Anatomy
- DHYG-H 214 Oral Anatomy
- DHYG-H 216 Chemistry and Nutrition
- DHYG-H 218 Fundamentals of Dental Hygiene
- DHYG-H 303 Radiology

**Second Semester**

- DHYG-H 205 Medical and Dental Emergencies
- DHYG-H 207 General Pathology II
- DHYG-H 215 Pharmacology and Therapeutics
- DHGY-H 217 Preventive Dentistry
- DHYG-H 219 Clinical Practice I
- DHYG-H 308 Dental Materials
- DHYG-H 321 Periodontics

**DENTAL HYGIENE (SUMMER SESSION)**

- DHYG-H 221 Clinical Dental Hygiene Procedures
- DHYG-H 250 Local Anesthesia and Pain Control
- DHYG-H 252 Introduction to Evidence-Based Dental Hygiene Care
- DHYG-H 305 Radiology Clinic I

**DENTAL HYGIENE (SECOND YEAR)**

**First Semester**

- DHYG-H 301 Clinical Practice II
- DHYG-H 304 Oral Pathology
- DHYG-H 306 Radiology Clinic II
- DHYG-H 311 Dental Health Education
- DHYG-H 347 Community Dental Health (introduction)
- DHYG-E 351 Advanced Dental Materials for Dental Auxiliaries

**Second Semester**

- DHYG-H 302 Clinical Practice III
- DHYG-H 307 Radiology Clinic III

- DHYG-H 344 Senior Hygiene Seminar
- DHYG-H 347 Community Dental Health (practicum)

## Undergraduate Programs

Undergraduate programs offered at Indiana University School of Dentistry in Indianapolis\*

Certificate in Dental Assisting

Associate of Science in Dental Hygiene (A.S.D.H.)

Bachelor of Science in Public Health Dental Hygiene (B.S.)

**Information about dental hygiene and dental assisting presented in this bulletin pertains only to programs on the Indianapolis campus.**

\*Undergraduate programs are also offered at several other IU campuses: the dental assisting certificate and dental hygiene associate's degree programs are available at the Fort Wayne, Gary, and South Bend campuses; the bachelor's degree program for dental hygienists is offered at Fort Wayne; and an associate degree program in dental laboratory technology is offered only at Fort Wayne.

Students interested in programs at Fort Wayne, Gary, and South Bend should check with counselors on those campuses for specific requirements, which may vary from those at Indianapolis.

## Dental Assisting Core Curriculum

- DAST-A 110 Oral Histology and Embryology
- DAST-A 111 Oral Pathology, Physiology, and Anatomy I
- DAST-A 112 Dental Therapeutics and Medical Emergencies
- DAST-A 113 Oral Pathology, Physiology, and Anatomy II
- DAST-A 114 Oral Anatomy
- DAST-A 121 Microbiology and Asepsis Technique
- DAST-A 131 Dental Materials I
- DAST-A 132 Dental Materials II
- DAST-A 141 Preventive Dentistry and Nutrition
- DAST-A 151 Radiology Clinic I
- DAST-A 152 Radiology Clinic II
- DAST-A 162 Written and Oral Communication
- DAST-A 171 Clinical Science I
- DAST-A 172 Clinical Science II
- DAST-A 182 Practice Management, Ethics, and Jurisprudence

### Electives

- DAST-A 190 Expanded Restorative Dentistry
- DAST-A 300 Special Topics in Dental Education

## Student Learning Outcomes

- Bachelor of Science in Public Health Dental Hygiene
- Associate of Science in Dental Hygiene
- Certificate in Dental Assisting

## Bachelor of Science in Public Health Dental Hygiene (B.S.)

The program's objectives are designed to provide students with the education and skills to:

1. perform dental hygiene services in a variety of settings (e.g., private dental practice, public health clinics, school systems, institutions, and hospitals);
2. design, implement, and evaluate effective preventive dental health programs for individuals and for groups in such settings as schools, hospitals, institutions, and community programs;
3. serve as a resource person and work in cooperation with other health personnel in assessing health care needs and providing health care services to the public;
4. plan, implement, and evaluate effective teaching methodologies in an educational setting;
5. supervise the teaching of dental hygiene services in a clinical/public health setting;
6. prepare for admission to graduate programs; and
7. continue their professional education and personal growth.

## Associate of Science in Dental Hygiene (A.S.D.H.)

The curriculum supports attainment of the following list of competencies expected of a dental hygienist entering the profession. The graduate will be prepared to:

1. apply a professional code of ethics in all endeavors;
2. adhere to state and federal laws, recommendations, regulations, and safety practices in the provision of dental hygiene care;
3. provide dental hygiene care to promote patient/client health and wellness using critical thinking and problem solving in the provision of evidence-based practice;
4. assume responsibility for dental hygiene actions and care based on accepted scientific theories and research as well as the accepted standard of care;
5. continuously perform self-assessment for lifelong learning and professional growth;
6. advance the profession through service activities and affiliations with professional organizations;
7. provide quality assurance mechanisms for health services;
8. communicate effectively with individuals and groups from diverse populations both orally and in writing;
9. provide accurate, consistent, and complete documentation for assessment, diagnosis, planning, implementation, and evaluation of dental hygiene services;
10. provide care to all clients using an individualized approach that is humane, empathetic, and caring;
11. provide planned educational services using appropriate interpersonal communication skills and educational strategies to promote optimal oral health;
12. initiate and assume responsibility for health promotion, health education, and disease prevention activities for diverse populations;
13. systematically collect, analyze, and record data on the general, oral, and psychosocial health status of a variety of patients/clients using methods consistent with medico-legal principles;
14. use critical decision-making skills to reach conclusions about the patients'/clients' dental

hygiene needs based on all available assessment data;

15. collaborate with the patient/client and/or other health professionals to formulate a comprehensive dental hygiene care plan that is patient/client-centered and based on current scientific evidence;
16. provide specialized treatment that includes preventive and therapeutic services designed to achieve and maintain oral health; and
17. evaluate the effectiveness of the implemented clinical, preventive, and educational services and modify as needed.

## Dental Assisting Certificate Program

The certificate program in dental assisting will provide a quality education to prepare the student to:

1. be proficient in applying knowledge of the basic behavioral and dental sciences to clinical practice in assessing and performing dental assisting procedures;
2. communicate effectively with other health care professionals in coordinating and providing patient care including the use of technology and practice management techniques;
3. apply problem-solving and decision-making skills when assisting with dental health services under the direction and supervision of the dentist;
4. conduct one's self with the highest levels of professionalism, ethics, and personal integrity in the practice of compassionate, patient-centered dentistry;
5. internalize the importance of life-long learning and understand the importance of remaining current in knowledge of dentistry as the dental health care delivery system changes;
6. acquire knowledge and skills to promote and participate in preventive dental care and support oral health through promotion of total health;
7. be knowledgeable of and comply with state and federal laws governing the practice of dentistry and dental assisting;
8. achieve success on all national examinations, certifications, and licensures; and
9. participate in leadership opportunities, professional organizations, and service to the community.

## Dental Assisting Certificate Program

### Vanchit John

Interim Chairperson  
Associate Professor, Periodontics and Allied Dental Programs

### Pamela T. Ford

Director of Campus Program and Clinical Assistant Professor

### Patricia A. Capps

Director of Distance-Learning Program and Clinical Associate Professor

Indiana University's Indianapolis-based dental assisting program is one year in length (two semesters) and is composed of 15 mandatory courses encompassing approximately 1,000 hours of lecture, laboratory, and clinical instruction. Students who successfully complete

the program receive a certificate and are eligible to take the Dental Assisting National Board Examination.

Applicants may now choose between two types of programs to earn a certificate in dental assisting: a traditional full-time on-campus program in which students receive all of their training at the School of Dentistry, or a full-time distance-learning program in which students complete most of their nonclinical courses online while receiving clinical experience in community dental offices.

### Distance Learning Program

The IU School of Dentistry distance-learning dental assisting program was established in 2007 as an alternative to the campus program to help make a dental assisting education more accessible to candidates who are not conveniently located near campus or who are trying to obtain a college education while managing full-time work and/or family responsibilities.

This program is the first to be offered in Indiana and one of only a very few in the United States. Like all of the School of Dentistry's other programs, it is fully accredited by the American Dental Association Commission on Dental Accreditation. Enrollment is currently limited to 12 students per year.

The program uses Indiana University's online course management system to teach nonclinical subjects, and students may access the courses at a time that is convenient to them. Students should anticipate devoting about two hours a day to their online studies, which will include reading, writing, and video assignments.

Students must also spend one Saturday a month throughout the school year on site at the dental school to complete laboratory assignments and take examinations.

Clinical training is provided primarily in the second semester by a sponsoring general dentist of the student's choice. Students will receive a minimum of 300 clock hours of clinical practice.

## Degree Programs

- Dental Assisting Certificate Program
- Dental Hygiene Degree Programs

## Dental Hygiene Programs

### Vanchit John

Interim Chairperson  
Associate Professor, Periodontics and Allied Dental Programs

### Nancy A. Young

Director and Associate Professor

The dental hygienist is a member of the dental health team providing educational, preventive, and therapeutic oral health services. Employment opportunities may be available in private dental practice, hospitals, public health, educational institutions, and research. Indiana University offers a program leading to an Associate of Science degree in dental hygiene and a program leading to a Bachelor of Science degree in public health dental hygiene.

### Associate of Science Degree

The Indianapolis-based Associate of Science degree program in dental hygiene is two academic years in length

and is composed of a core curriculum of 27 courses presented over four semesters and one summer session. All courses are mandatory.

### Bachelor of Science Degree

The Bachelor of Science degree-completion program in public health dental hygiene provides an opportunity for graduate dental hygienists to develop further expertise in public health methods or dental hygiene education and includes application of practical experience.

It is designed to meet the needs of part-time students who wish to work while completing their bachelor's degree. It prepares hygienists for leadership roles in education, public health, commercial ventures, professional associations, and/or health advocacy.

It can enhance career opportunities available to dental hygienists in a variety of areas, including but not limited to state and county health departments, academia, sales and marketing, educational software development, pharmaceuticals, dental education consulting, dental insurance companies, research, and clinical dental hygiene. Program activities promote development of professional leadership skills and prepare hygienists for entry into graduate programs.

### Dental Assisting Core Curriculum

- DAST-A 110 Oral Histology and Embryology
- DAST-A 111 Oral Pathology, Physiology, and Anatomy I
- DAST-A 112 Dental Therapeutics and Medical Emergencies
- DAST-A 113 Oral Pathology, Physiology, and Anatomy II
- DAST-A 114 Oral Anatomy
- DAST-A 121 Microbiology and Asepsis Technique
- DAST-A 131 Dental Materials I
- DAST-A 132 Dental Materials II
- DAST-A 141 Preventive Dentistry and Nutrition
- DAST-A 151 Radiology Clinic I
- DAST-A 152 Radiology Clinic II
- DAST-A 162 Written and Oral Communication
- DAST-A 171 Clinical Science I
- DAST-A 172 Clinical Science II
- DAST-A 182 Practice Management, Ethics, and Jurisprudence

### Electives

- DAST-A 190 Expanded Restorative Dentistry
- DAST-A 300 Special Topics in Dental Education

## Graduate Admissions

- Doctor of Dental Surgery (D.D.S.)
- Master of Science (M.S.) Majors
- Doctor of Philosophy in Dental Science (Ph.D.)

### Doctor of Dental Surgery (D.D.S.)

#### Predental Requirements

Most students accepted by IUSD attain a bachelor's degree prior to enrollment. The predental collegiate training may be taken at any accredited college or university in the United States. Required courses cannot

be taken on a Pass/Fail basis. Special credit for required courses may be accepted if all portions of the course work (i.e., lecture, laboratory) have been properly evaluated and appear on official transcripts. Because details of courses offered in the various accredited colleges may vary, courses must be carefully considered when a program is planned, particularly in the fields of science. All prerequisite science courses, except biochemistry and physiology, require laboratories. Extra work in the areas of biology and chemistry is strongly encouraged.

Prior to matriculation at IUSD, applicants must complete a minimum of 90 semester (or 135 quarter) hours of which no more than 60 hours may be completed at the junior college level. The following predental requirements must be met in order to qualify for admission:

Two semesters or three quarters (minimum of 8 semester hours/12 quarter hours) of each of the following:

- Biology or zoology, with laboratory
- Inorganic chemistry, with laboratory
- General physics, with laboratory

One semester or two quarters (minimum of 4 semester hours/6 quarter hours) of each of the following:

- Organic chemistry, with laboratory
- Anatomy, with laboratory

Three semester hours or 4.5 quarter hours of biochemistry and physiology lecture

One semester or one quarter (minimum of two semester hours/three quarter hours) of each of the following:

- Introductory psychology
- English composition

Courses in cell biology, molecular biology, genetics, solid art, business administration or personal finance, histology, and medical terminology are strongly recommended but not required. Likewise, a minor in anthropology, psychology, sociology, or Spanish is strongly encouraged. All incoming dental students must be familiar with computer usage.

#### Application Procedure

Although the current application deadline is December 1, the selection process begins in November, which therefore gives early applicants a decided advantage. Electronic applications to dental school are available through the American Dental Education Association Web site, [www.adea.org](http://www.adea.org).

Applicants must also take the Dental Admission Test (DAT), which they may do before submitting the Associated American Dental Schools Application Service (AADSAS) application to IUSD, but IUSD will not grant an invitation for an interview until the school receives an applicant's DAT scores. The DAT can be taken nearly any day of the year at Prometric Candidate Contact Centers throughout the country. Students should take this test only after completing the required chemistry and biology courses. Applicants may request an interpretation of test results from the IUSD Student Records and Admissions Office. Details concerning the DAT may be obtained by writing the American Dental Association, 211 E. Chicago Avenue, Chicago, IL 60611; or by visiting [www.ada.org](http://www.ada.org).

Applicants will be invited to the school for a personal interview based upon the status of their application and their academic achievement. Criteria for admission include, but are not limited to, overall grade point average, science grade point average, DAT scores, interviews, recommendations, hours of college credit, degrees received, motivation, exploration of dentistry, manual and artistic skills, character, personality, ethics, and health. Applications from all underrepresented groups are encouraged. Selections are made on an individual basis upon appraisal of the applicant's established record and potential for development.

### Advanced Standing Program Requirements

IUSD offers the Advanced Standing Program (ASP) for selected individuals who have received their dental degree from an institution outside the United States or Canada. Upon successful completion of the ASP, the candidate will receive the D.D.S. degree from IUSD. The individualized program ranges in length from one to three years.

Because admission to the ASP is limited by the dental school's available space and resources, IUSD is able to admit no more than five candidates to the ASP each year, and commonly admits only one candidate per year. Applications are accepted only between June 1 and January 1, unless the candidate is a current IUSD faculty member.

When considering candidates for the ASP, the Admissions Committee interviews and gives preference to the following:

- Current IU School of Dentistry faculty
- Current students in or recent graduates from IU School of Dentistry's advanced education programs
- Faculty from other institutions who express interest in faculty openings at IU School of Dentistry
- Other residents of the State of Indiana

Because of the limited nature of this program, nonresidents of the State of Indiana who do not fall into one of the above categories are not eligible for admission.

The following criteria are used in the selection process, and the Admissions Committee will consider only those candidates for whom all the information is available:

- Successful completion of National Board Dental Examination Parts 1 and 2
- Results from an interview with Admissions Committee members
- Evaluation of dental school transcripts
- Two letters of recommendation (one personal and one professional)
- TOEFL test of English language proficiency as required by Indiana University for applicants whose first language is not English

An individualized curriculum is designed for each candidate who is admitted to the ASP, based upon an assessment of the candidate's previous education, training, experience, and demonstrated competencies. This assessment may include the following:

- Written and practical examinations
- Examples of technique work

- Other information considered by the faculty to be useful in its deliberation

## Master's Degrees

Only students who have a minimum cumulative grade point average of 3.0 (on a scale of 4.0) will be considered for admission, unless, under exceptional circumstances, the prospective student can provide evidence that he or she is capable of successfully completing the graduate dental program.

Application forms must be accompanied by transcripts of undergraduate and professional school work together with such additional materials as may serve to determine eligibility and ability to satisfactorily pursue an advanced course of study.

Letters of support attesting to the candidate's academic background, professional experience, and character should be requested from at least two individuals who have direct knowledge of the candidate's potential to do graduate-level work. To request application information for one of the M.S. or M.S.D. programs, contact the School of Dentistry's Office of Graduate Education (see Contact Information).

Deadline dates for completed applications vary among the individual graduate programs. In addition, several of the individual graduate programs participate in the Postdoctoral Application Support Service (PASS<sup>1</sup>) and the Postdoctoral Dental Matching Program (Match<sup>2</sup>), two national services designed to help applicants obtain positions in first-year postdoctoral programs of their choice, as well as to help the programs obtain applicants of their choice.

Candidates must register in these services if the program is a participant. For applications for the 2010-2011 academic year, three IU graduate programs are participating in both PASS and Match: orthodontics, pediatric dentistry, and oral and maxillofacial surgery.

The endodontics and prosthodontics graduate programs are participating in PASS. Candidates should contact the dental school's Office of Graduate Education or the appropriate program director to obtain more information about application deadlines, national application services, and other details related to the application process.

1. Postdoctoral Application Support Service (PASS), offered by the American Dental Education Association: [http://www.adea.org/DENTAL\\_EDUCATION\\_PATHWAYS/PASS/Pages/default.aspx](http://www.adea.org/DENTAL_EDUCATION_PATHWAYS/PASS/Pages/default.aspx)

2. Postdoctoral Dental Matching Program (Match), administered by National Matching Services, Inc.: [www.natmatch.com/dentres](http://www.natmatch.com/dentres)

## PhD in Dental Science

The program is open to persons who have earned the Doctor of Dental Surgery degree or its equivalent as well as graduates of bachelor of science degree programs. Applicants must have a minimum grade point average of 3.0 or higher on a 4.0 scale (grade point averages from the dental degree in the case of dental school graduates).

Candidates for the Ph.D. degree program must have a minimum percentile score on the Graduate Record

Examination (GRE) of 55 percent in the verbal, quantitative, or analytical section. In addition, an acceptable TOEFL score must be obtained by applicants from non-English-speaking countries, as follows: a score of 550 or higher on the paper-based test, 213 or higher on the computer-based test, or 79 or higher on the Internet-based test.

## Contact Information

School of Dentistry Web site: [www.iusd.iupui.edu](http://www.iusd.iupui.edu)

Requests for application forms or information about dental education programs should be directed to:

### Dentistry [D.D.S.] and Dental Hygiene [A.S.D.H.] degree programs at Indianapolis:

Student Records and Admissions Office, Room 105  
Indiana University School of Dentistry  
1121 West Michigan Street  
Indianapolis, IN 46202-5186  
Telephone: (317) 274-8173  
Fax: (317) 278-9066  
E-mail: [ds-stdnt@iupui.edu](mailto:ds-stdnt@iupui.edu)

### Bachelor of Science Degree in Public Health Dental Hygiene at Indianapolis:

Director of Dental Hygiene  
Periodontics and Allied Dental Programs  
Indiana University School of Dentistry  
1121 West Michigan Street  
Indianapolis, IN 46202-5186  
Telephone: (317) 274-7801

### M.S., M.S.D., and Ph.D. degree programs at Indianapolis:

Office of Graduate Education  
Indiana University School of Dentistry  
1121 West Michigan Street  
Indianapolis, IN 46202-5186  
Telephone: (317) 274-5348  
Fax: (317) 278-9066  
E-mail: [ds-grad@iupui.edu](mailto:ds-grad@iupui.edu)

### Oral and Maxillofacial Surgery and the General Practice Residency certificate programs:

Residency/Education Coordinator  
GPR and Oral and Maxillofacial Surgery Programs  
Regenstrief Health Center  
1050 Wishard Blvd., Room 4201  
Indianapolis, IN 46202-2872  
Telephone: (317) 278-3662; Fax: (317) 278-2243

### Dental Assisting program at Indianapolis:

Director of Dental Assisting  
Periodontics and Allied Dental Programs  
Indiana University School of Dentistry  
1121 West Michigan Street  
Indianapolis, IN 46202-5186  
Telephone: (317) 274-4407

The School of Dentistry Student Records and Admissions Office is open 8 a.m. to 5 p.m., Monday through Friday. The dental school fax number is (317) 278-9066, and the Web site is [www.iusd.iupui.edu](http://www.iusd.iupui.edu).

For information on allied dental programs at other Indiana University campuses, contact:

### Programs at Fort Wayne:

Director of Dental Hygiene

or  
Director of Dental Assisting  
or  
Director of Dental Laboratory Technology  
Neff Hall 150  
Indiana University–Purdue University Fort Wayne  
2101 E. Coliseum Boulevard  
Fort Wayne, IN 46805-1499

[www.ipfw.edu/dental](http://www.ipfw.edu/dental)

Telephone: (260) 481-6837

### Programs at South Bend:

Director of Dental Education  
(Dental Hygiene and Dental Assisting)  
Riverside Hall 113  
Indiana University South Bend  
1700 Mishawaka Avenue  
Post Office Box 7111  
South Bend, IN 46634-7111

[www.iusb.edu/~sbdental](http://www.iusb.edu/~sbdental)

Telephone: (574) 520-4158; Fax (574) 520-4854

### Programs at Gary:

Director of Dental Education  
(Dental Hygiene and Dental Assisting)  
Indiana University Northwest  
3400 Broadway  
Gary, IN 46408-1197

[www.iun.edu/~dental](http://www.iun.edu/~dental)

Telephone: (219) 980-6770; Fax (219) 981-4249

## Degree Programs

The Indiana University School of Dentistry offers many graduate programs.

### Dental Science Ph.D.

### Dentistry D.D.S.

### Master of Science in Dentistry

- [Dental Materials](#)
- [Endodontics](#)
- [Operative Dentistry](#)
- [Orthodontics](#)
- [Pediatric Dentistry](#)
- [Periodontics](#)
- [Preventive Dentistry](#)
- [Prosthodontics](#)

### Certificate Residency Programs

- [General Practice](#)
- [Oral and Maxillofacial Surgery](#)

For more information on IUSD graduate programs visit us at <http://www.iusd.iupui.edu/departments/education/graduate-education/graduate-programs/>.

## Student Learning Outcomes

### Doctorate Programs

- Doctor of Dental Surgery (D.D.S.)
- Doctor of Philosophy in Dental Science (Ph.D.)

### Master of Science in Dentistry (M.S.D.) Programs

- Dental Materials
- Endodontics

- Operative Dentistry
- Oral and Maxillofacial Surgery
- Orthodontics
- Pediatric Dentistry
- Periodontics
- Preventive Dentistry
- Prosthodontics

### Residency Programs

- General Practice

## Doctor of Dental Surgery (D.D.S.)

The Doctor of Dental Surgery degree program is four academic years in length. The curriculum includes 106 core courses and modules that are presented over eight semesters and three summer sessions.

All of the courses/modules are mandatory for awarding of the degree. The curriculum supports the attainment of the following list of competencies expected of a general dentist entering the profession. The Doctor of Dental Surgery graduate will be prepared to:

1. assess and diagnose the child, adolescent, adult, geriatric, and special needs patient;
2. perform treatment planning and case presentations for the child, adolescent, adult, and geriatric patient;
3. communicate and collaborate with groups and individuals to promote oral and general health including strategies, resources, and interventions as appropriate for the prevention of oral disease in the community;
4. control pain and anxiety through clinical pharmacology and management of related problems;
5. prevent and manage dental and medical emergencies;
6. restore defective and/or missing teeth to appropriate form, function, and esthetics in the child patient;
7. diagnose and restore defective teeth to form, function, and esthetics in the adolescent, adult, and geriatric patient;
8. provide fixed replacement of missing teeth to restore appropriate form, function, and esthetics in the uncomplicated adolescent, adult, and geriatric patient;
9. provide restoration of uncomplicated partially edentulous patients with removable partial dentures to maintain oral function, health, comfort, and appearance;
10. provide restoration of uncomplicated edentulous patients with complete dentures to maintain oral function, health, comfort, and appearance;
11. diagnose and manage periodontal disorders;
12. prevent, diagnose, and manage pulpal and periradicular diseases;
13. diagnose and manage oral mucosal disorders;
14. collect and assess diagnostic information to plan for and perform uncomplicated oral surgical procedures;
15. recognize malocclusion in the primary, mixed, and permanent dentition and to identify from an acceptable problem list an uncomplicated case with limited developmental/acquired abnormality;
16. describe the indications, contraindications, advantages, and disadvantages of space maintainers and demonstrate the basic skills necessary in making simple orthodontics appliances and space maintainers;
17. discern and manage ethical issues and problems in dental practice;
18. understand and apply the appropriate codes, rules, laws, and regulations that govern dental practice;
19. demonstrate behavioral patient management and interpersonal skills;
20. understand the fundamental elements of managing a dental practice;
21. perform and supervise infection control procedures to prevent transmission of infectious diseases to patients, the dentist, the staff, and dental laboratory technicians;
22. critically evaluate and incorporate new dental procedures/therapies into their practices when proven scientifically efficacious;
23. recognize the role of lifelong learning and self-assessment in maintaining competency;
24. use information technology resources; and
25. detect, diagnose, assess the risk for, prevent, and manage dental caries.

## Doctor of Philosophy in Dental Science (Ph.D.)

The graduate of the Ph.D. program will be prepared to:

1. demonstrate an in-depth understanding of the biology of the oral cavity;
2. demonstrate the principles/mechanisms pertinent to human physiology and disease;
3. demonstrate competency in performing complex scientific literature searches;
4. write a detailed grant proposal;
5. express scientific material, including original research data, in both oral and written form;
6. demonstrate skills in critical thinking; and
7. plan and undertake independent research.

## Master of Science in Dentistry in Operative Dentistry (M.S.D.)

The graduates of the two-year postdoctoral program in Operative Dentistry will be prepared to:

1. manage caries risk patients based on Caries Management by Risk Assessment (CAMBRA);
2. discuss current direct and indirect dental restorative materials (gold, dental amalgam, ceramics, glass ionomer cement, and resin-matrix composite) including associated setting reactions, physical properties, and indications and contraindications for their clinical use;
3. demonstrate clinical proficiency when performing routine and advanced restorative procedures;
4. demonstrate a broad knowledge base of dental restorative materials and procedures;
5. demonstrate knowledge of current restorative dentistry scientific literature;
6. develop and present evidence-based restorative dentistry lectures; and
7. develop a research protocol and perform controlled dental research.

## Master of Science in Dentistry in Preventive Dentistry (M.S.D.)

The graduates of the Preventive Dentistry program will be able to define terms and explain basic principles, concepts, and theories related to Cariology. They will be prepared to:

1. describe the dental caries process in detail;
2. describe and contrast the interaction of the etiological factors associated with dental caries;
3. distinguish and assess the different presentations of dental caries;
4. recognize the epidemiology of dental caries;
5. discriminate populations at high risk for dental caries;
6. analyze the external and internal risk determinants of dental caries;
7. compare and contrast the different methodologies utilized for caries detection;
8. demonstrate diagnosis of dental caries;
9. assess caries risk status;
10. assess salivary flow measurements, buffering capacity, and management approaches for patients with low salivary flow;
11. compare and contrast some of the different strategies utilized for caries management;
12. discriminate the therapeutics used in caries management;
13. compare and contrast the use of sealants based on risk assessment, for individuals and populations;
14. support the values of prevention, evaluation, and reevaluation;
15. develop an Oral Health Plan to be incorporated by a health professional team;
16. develop a community health plan;
17. summarize the basic principles on developing patient education plans;
18. critically review scientific methodology; and
19. recognize the different methodologies and techniques related to caries research.

## Master of Science in Dentistry in Dental Materials (M.S.D.)

Graduates of the two-year postdoctoral program in Dental Materials will achieve core competencies in Materials Knowledge, Critical Thinking, and Effective Communication.

### Materials Knowledge

The graduate will be prepared to:

1. describe major classes of dental biomaterials used in clinical dentistry;
2. explain the differences in the chemical nature of the major classes of materials;
3. recognize the effects of chemical nature on the mechanical behavior of materials; and
4. describe the relationship between material characteristics and clinical performance of dental biomaterials.

### Critical Thinking

The graduate will be prepared to:

1. identify the physical and chemical principles of major material testing methods;
2. select and justify appropriate testing methods for major classes of dental biomaterials; and
3. formulate hypotheses and design the necessary experiments for a given material evaluation scenario.

### Effective Communication

The graduate will be prepared to:

1. present research methods and results correctly in oral and written reports;
2. provide evidence-based arguments on research findings in oral and written reports; and
3. provide suggestions on dental biomaterial selection based on current dental literature.

## General Practice Residency Program

The graduate of the General Practice Residency program will be prepared to:

1. function as a patient's primary care provider, treating or managing all aspects of oral health care using advanced dental treatment modalities as well as understanding the oral health needs of the community by engaging in community service and directing health promotion and disease prevention activities;
2. enhance and expand knowledge and skills in multidisciplinary comprehensive and emergency dental care, therefore providing a greater confidence in all phases of professional life;
3. plan and provide multidisciplinary oral health care for a wide variety of patients including patients with special needs and while utilizing the values of professional ethics, lifelong learning, patient-centered care, adaptability, and acceptance of cultural diversity in professional practice.
4. interact with other health care professionals in the hospitals, outpatient clinics, community health center environments, and within interdisciplinary health care teams, in order to facilitate the patients' total health care; and
5. participate in critical-thinking analysis, evidenced-based care, and technology-based information retrieval systems and apply this knowledge in treatment decisions and continuous quality improvement.

## Master of Science in Dentistry in Endodontics (M.S.D.)

The advanced specialty education program in Endodontics is accredited by the American Dental Association (ADA) Commission on Dental Accreditation. Indiana University School of Dentistry's learning outcomes for the master's degree in endodontics are fully supportive of the outcomes required by the ADA.

IU's program follows academic and clinical standards determined by the commission to ensure the quality and continuous improvement of dental and dentally related education, and to reflect the evolving practice of dentistry. Full details are published in the ADA's Standards for Dental Education Programs under Advanced Specialty Education Programs, Endodontics

Standard 4: Curriculum and Program Duration (<http://www.ada.org/115.aspx#general>).

## Master of Science in Dentistry in Orthodontics (M.S.D.)

The advanced specialty education program in Orthodontics is accredited by the American Dental Association (ADA) Commission on Dental Accreditation. Indiana University School of Dentistry's learning outcomes for the master's degree in orthodontics are fully supportive of the outcomes required by the ADA.

IU's program follows academic and clinical standards determined by the commission to ensure the quality and continuous improvement of dental and dentally related education, and to reflect the evolving practice of dentistry. Full details are published in the ADA's Standards for Dental Education Programs under Advanced Specialty Education Programs, Orthodontics and Dental Facial Orthopedics Standard 4: Curriculum and Program Duration (<http://www.ada.org/115.aspx#general>).

## Master of Science in Dentistry in Periodontics (M.S.D.)

The advanced specialty education program in Periodontics is accredited by the American Dental Association (ADA) Commission on Dental Accreditation. Indiana University School of Dentistry's learning outcomes for the master's degree in periodontics are fully supportive of the outcomes required by the ADA.

IU's program follows academic and clinical standards determined by the commission to ensure the quality and continuous improvement of dental and dentally related education, and to reflect the evolving practice of dentistry. Full details are published in the ADA's Standards for Dental Education Programs under Advanced Specialty Education Programs, Periodontics Standard 4: Curriculum and Program Duration (<http://www.ada.org/115.aspx#general>).

## Master of Science in Dentistry in Prosthodontics (M.S.D.)

The advanced specialty education program in Prosthodontics is accredited by the American Dental Association (ADA) Commission on Dental Accreditation. Indiana University School of Dentistry's learning outcomes for the master's degree in prosthodontics are fully supportive of the outcomes required by the ADA.

IU's program follows academic and clinical standards determined by the commission to ensure the quality and continuous improvement of dental and dentally related education, and to reflect the evolving practice of dentistry. Full details are published in the ADA's Standards for Dental Education Programs under Advanced Specialty Education Programs, Prosthodontics Standard 4: Curriculum and Program Duration (<http://www.ada.org/115.aspx#general>).

## Master of Science in Dentistry in Oral and Maxillofacial Surgery (M.S.D.)

The advanced specialty education program in Oral and Maxillofacial Surgery is accredited by the American Dental Association (ADA) Commission on Dental Accreditation. Indiana University School of Dentistry's learning outcomes

for the specialty certificate in oral and maxillofacial surgery are fully supportive of the outcomes required by the ADA.

IU's program follows academic and clinical standards determined by the commission to ensure the quality and continuous improvement of dental and dentally related education, and to reflect the evolving practice of dentistry. Full details are published in the ADA's Standards for Dental Education Programs under Advanced Specialty Education Programs, Oral and Maxillofacial Surgery Standard 4: Curriculum and Program Duration (<http://www.ada.org/115.aspx#general>).

## Master of Science in Dentistry in Pediatric Dentistry (M.S.D.)

The advanced specialty education program in Pediatric Dentistry is accredited by the American Dental Association (ADA) Commission on Dental Accreditation. Indiana University School of Dentistry's learning outcomes for the master's degree in pediatric dentistry's are fully supportive of the outcomes required by the ADA.

IU's program follows academic and clinical standards determined by the commission to ensure the quality and continuous improvement of dental and dentally related education, and to reflect the evolving practice of dentistry. Full details are published in the ADA's Standards for Dental Education Programs under Advanced Specialty Education Programs, Pediatric Dentistry Standard 4: Curriculum and Program Duration (<http://www.ada.org/115.aspx#general>).

## Graduate Programs

The Indiana University School of Dentistry offers many graduate programs.

[Dental Science Ph.D.](#)

[Dentistry D.D.S.](#)

**Master of Science in Dentistry**

- [Dental Materials](#)
- [Endodontics](#)
- [Operative Dentistry](#)
- [Orthodontics](#)
- [Pediatric Dentistry](#)
- [Periodontics](#)
- [Preventive Dentistry](#)
- [Prosthodontics](#)

**Certificate Residency Programs**

- [General Practice](#)
- [Oral and Maxillofacial Surgery](#)

For more information on IUSD graduate programs visit us at <http://www.iusd.iupui.edu/departments/education/graduate-education/graduate-programs/>.

## Student Organizations & Services

The School of Dentistry website has a [complete list of school organizations and associations](#).

## Academic Policies & Procedures

Please refer to <http://www.indiana.edu/~bulletin/iu.dentistry/2009-20011/policies/index.shtml> for the School of Dentistry Policies and Procedures.

## Faculty

### Administrative Officers

- Dean Lawrence I. Goldblatt
- Executive Associate Dean Jeffrey A. Dean

### Associate Deans

- Jeffrey A. Dean, Academic Affairs
- Lawrence P. Garetto, Dental Education
- Michael J. Kowolik, Graduate Education
- Pamela P. Shaw, Diversity, Equity, and Inclusion
- George P. Willis, Clinical Affairs
- Domenick T. Zero, Research

### Assistant Dean

- Robert H. Kasberg, Student Affairs

### Departmental Chairpersons

- William J. Babler, Department of Oral Biology (Interim)
- Jeffrey D. Bennett, Department of Oral Surgery and Hospital Dentistry
- David T. Brown, Department of Restorative Dentistry
- Katherine S. Kula, Department of Orthodontics and Oral Facial Genetics
- Vanchit John, Department of Periodontics and Allied Dental Programs (Interim)
- James E. Jones, Department of Pediatric Dentistry
- Kenneth J. Spolnik, Department of Endodontics
- Domenick T. Zero, Department of Preventive and Community Dentistry
- Susan L. Zunt, Department of Oral Pathology, Medicine, and Radiology

See the School of Dentistry website for a complete list of the [School of Dentistry faculty](#).