School of Dentistry Welcome

Welcome to Indiana University School of Dentistry (IUSD), one of the oldest and largest public dental schools in the United States. Many of the dental profession's "firsts" took place at Indiana University, including the inventions of the first bitewing X-ray and the stannous fluoride formula that would become Crest® toothpaste, as well as authorship of seminal textbooks in pediatric dentistry, biomaterials, and oral radiology.

On any given weekday, more than 1,000 students, faculty, and staff work, learn, and grow on our dental school campuses. In fact, 80 percent of the state's dentists graduated from Indiana University School of Dentistry. The remainder practice dentistry and allied fields in nearly all of the 50 states and about 30 other countries.

Indiana University School of Dentistry is a member of the American Dental Education Association and is fully accredited by the Commission on Dental Accreditation of the American Dental Association. IU's dental school was established as the Indiana Dental College in 1879 and acquired by Indiana University in 1925. It is the only dental school in the state. The school is located on the campus of IU Indianapolis, adjacent to the Indiana University Medical Center. Clinical facilities in the School of Dentistry were modernized and expanded in 2018 with the addition of the state-of-the-art, 45,000-square-foot James J. Fritts, D.D.S. Clinical Care Center.

Multiple degrees and certificate programs are available at Indiana University School of Dentistry, including D.D.S., M.S.D. and M.S. in advanced practice specialties, Ph.D., dental hygiene and dental assisting.

We continue to modernize our curriculum, integrating digital technology into patient care and providing earlier and more clinical experiences for all dental students. Over the next few years, we will grow our clinical operations by renovating our Orthodontics clinic and creating a new special care dentistry clinic to treat patients with physical, intellectual, and developmental disabilities and complex medical conditions--a population that is historically underserved.

At the Indiana University School of Dentistry, we believe in the capability of research to change people's lives. Our research enterprise continues to flourish and our faculty are actively engaged in federally and privately funded research areas, allowing us to expand our scope of clinical and translational oral health research, our Dental Informatics program, and our collaborative basic science research in bone and musculoskeletal health.

Clinic patients are drawn from a population area of about one million people. The great variety of cases treated provides each student with abundant opportunities to master techniques. The school also maintains dental clinics at Riley Hospital for Children; University Hospital at the IU Medical Center; Indiana University Fort Wayne; the Stone Family Health Center in Evansville, Ind., and numerous off-campus sites, many in federally qualified community health centers.

We are also immensely proud of the clinical care provided by our students and faculty outside the dental school. Our community-based dental education places our students in dental practices and federally qualified health centers throughout the state. Over the spring and summer semesters, our students and faculty cared for underserved communities in Ecuador, Guatemala, Mexico, on the Texas/Mexico border, and at a South Dakota Indian reservation.

This academic bulletin describes the opportunities available at Indiana University School of Dentistry in Indianapolis and Fort Wayne and outlines the requirements for admission and program completion. Undergraduate programs in allied dental education are offered on IU's Northwest and South Bend campuses. Students interested in undergraduate programs at IU Northwest and IU South Bend should check with an academic advisor on these campuses for specific requirements, which may vary from the requirements on the Indianapolis and Fort Wayne campuses.

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Overview

For over 145 years, Indiana University School of Dentistry has made a difference in the lives of the people of Indiana, the U.S., and the world—and we're just getting started. Under the leadership of Dean Carol Anne Murdoch-Kinch, we're continuing to advance oral health by preparing the next generation of oral health professionals, conducting innovative research that's shaping the profession, and providing oral health care to thousands of people each year.

Our mission The mission of the Indiana University School of Dentistry is to advance the oral and systemic health of the people of the state of Indiana and globally through excellence in teaching and learning, research and creative activities, patient care, civic engagement and service.

Our vision Indiana University School of Dentistry will be a global leader, advancing oral health as an essential component of overall health, through excellence and innovation in education, patient care, research, and community engagement and service, in Indiana and around the world.

Our goals The mission of Indiana University School of Dentistry includes these goals:

Teaching and learning

- Attract and support a well prepared and diverse student population for all School of Dentistry oral health profession programs
- Enhance student learning and develop graduates who are competent clinicians, critical thinkers, and lifelong learners who are ethical, socially aware, and culturally sensitive oral health professionals

- Attract and retain quality faculty and provide support to enhance effective teaching and learning in clinical, laboratory, classroom, and service learning settings

Research and creative activities

- Excel in high-quality, innovative research and scholarly activities that engage faculty, students, and staff; attract external funding; increase our national standing; and lead to improvements in oral and systemic health

Patient care

- Provide comprehensive, evidence-based, quality oral health services to individuals from any socioeconomic or cultural group

Civic engagement and service

- Serve local, state, national, and global communities through partnerships involving clinical care, service learning, and community-engaged scholarship in addition to serving the university and the profession

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Contact Information

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Website: https://dentistry.iu.edu/

Doctor of Dental Surgery (D.D.S.) and International Dentist Program (IDP)
Office of Student Affairs and Admissions

Dr. Joan Kowolik, Director of Admissions

Stacy Brown, Assistant Director of Admissions
Indiana University School of Dentistry
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M.S.D., M.S., and Ph.D. Degree Programs
Office of Graduate Education
Gilian Sullivan, Graduate Education Coordinator
Indiana University School of Dentistry
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Oral and Maxillofacial Surgery Residency Certificate Program
Department of Oral and Maxillofacial Surgery and Hospital Dentistry
Lori Mucci, Program Coordinator
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Dental Hygiene Education - Indianapolis
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Dental Assisting Education - Indianapolis
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Accreditation

Educational programs, including predoctoral dental education programs, advanced dental education programs and allied dental education programs, at Indiana University School of Dentistry are fully accredited by the Commission on Dental Accreditation (CODA).

Complaint Policy It is the policy of this institution and CODA that all students should have an opportunity to file complaints with the Commission. A complaint is defined by the Commission on Dental Accreditation as an entity alleging that a commission–accredited educational program, a program which has an application for initial accreditation pending, or the Commission may not be in substantial compliance with Commission standards or required accreditation procedures. The Commission on Dental Accreditation will review complaints that relate to a program's compliance with the accreditation standards. The Commission is interested in the sustained quality and continued improvement of dental and dental-related education programs but does not intervene on behalf of individuals or act as a court of appeals for treatment received by patients or individuals in matters of admission, appointment, promotion, or dismissal of faculty, staff or students.

A copy of the appropriate accreditation standards and/or the Commission's policy and procedure for submission of complaints may be obtained by contacting the Commission at 211 East Chicago Avenue, Chicago, IL 60611-2678 or by calling 1-312-440-4653.

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Policies & Procedures

Academic Programs
Indiana University School of Dentistry (IUSD) provides student handbooks as a guide to the academic program requirements for obtaining the D.D.S. degree, M.S., M.S.D. and Ph.D. degrees, undergraduate Bachelor of Science Dental Hygiene degree, and Certificate in Dental Assisting. The student handbooks convey information related to financial aid, student activities, and student services. The Clinic Manual, Infection Control Manual, and IUSD Code of Professional Conduct as well as the applicable policies and procedures of Indiana University and IUSD are the sources for the official guidelines, procedures, and standards of the school.

Below is a select list of policies and procedures related to academic performance and evaluation, personal conduct, and professionalism. A complete version may be requested. Please refer to the Contact Information section for more details or review the policies section of the current Indiana University Indianapolis campus bulletin.

- Academic Progress and Good Standing
- Academic Misconduct and Professional Behavior
- Assessments
- Attendance
- Clinic and Laboratory Policies
- Civility and Disorderly Conduct
- Civility on Websites Maintained on University Servers
- Compliance, Immunizations and Credentials
- Criminal Background Checks
- Dean's List
- Disabilities Accommodation Policy
- Dress Code
- Graduating with Academic Distinction
- Health Insurance
- Incomplete Grade Policy
- Mobile Device and Security
- Non-Retaliation and Whistleblower Policy
- Patient Confidentiality
- Plagiarism
- Remediation
- Requirements for Graduation
- Safety and Infection Control
- Sexual Misconduct/Violence
- Smoking, Drugs and Alcohol
- Testing Policy
- Threatening Behavior and Violence
- Weapons Policy
- Work Study

Non-Discrimination Notice
Indiana University pledges itself to continue its commitment to the achievement of equal opportunity within the university and throughout American society as a whole. In this regard, Indiana University will recruit, hire, promote, educate, and provide services to persons based upon their individual qualifications. Indiana University prohibits discrimination on the basis of age, color, disability, ethnicity, sex, gender identity, gender expression, genetic information, marital status, national origin, race, religion, sexual orientation, or veteran status. As required by Title IX of the Education Amendments of 1972, Indiana University does not discriminate on the basis of sex in its educational programs and activities, including employment and admission. Questions specific to Title IX may be referred to the U.S. Department of Education's Office for Civil Rights or the University Title IX Coordinator.

Inclusive Excellence
Diversity, equity, inclusion, and belonging are core values of Indiana University School of Dentistry. We believe that these core values enrich and empower us to provide better education for our students, better care for our patients, a better working environment for our employees, and better citizenship to serve our world. We are committed to attracting and retaining a diverse faculty, staff, and student population across all areas of learning, research, and patient care. We are committed to removing barriers and empowering current and future members of our community to realize their full potential. We strive to create, celebrate, and uphold work, research, patient care, learning environments and global community engagements that are inclusive, equitable, and welcoming.

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

No matter what your professional goals are, the Doctor of Dental Surgery (D.D.S.) programs at the Indiana University School of Dentistry will prepare you for a successful career in dentistry.

Doctor of Dental Surgery (D.D.S.) Become a licensed dentist ready to enter clinical practice or pursue advanced dental education.

Indiana University International Dentist Program (IU-IDP) Internationally trained dentists earn a D.D.S. degree and become licensed to practice in the United States.

Dual degree D.D.S. & M.P.H. Add a Master of Public Health degree from the Richard M. Fairbanks School of Public Health to your D.D.S. degree.

Dual degree D.D.S. & M.B.A. Combine a D.D.S. degree with an Master of Business Administration degree from the Kelley School of Business.

Dual degree D.D.S. & Ph.D. Combine a D.D.S. degree with a Ph.D. in Dental and Oral Health Science in seven years.

Learn more about how to apply to Indiana University School of Dentistry's D.D.S. programs and review the tuition and fees, course descriptions, and institutional competencies.

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Updated April 2025

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

Each of the academic programs at Indiana University School of Dentistry has its own admission criteria, application process, and application deadlines.

Learn more about the admissions process and how to apply:

- Doctor of Dental Surgery (D.D.S.)
- Indiana University International Dentist Program (IU-IDP)
- D.D.S. & Master of Public Health Dual Degree
- D.D.S. & Master of Business Administration Dual Degree
- D.D.S. & Ph.D. Dual Degree

Learn more about the prerequisites for pre-dental students preparing for a career in dentistry:

- Pre-dental Requirements
- Pre-dental Advising

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

Application Process
Please refer to D.D.S. "How to Apply" section on the Indiana University School of Dentistry (IUSD) website for a comprehensive description of the admissions process and procedures for the Doctor of Dental Surgery (D.D.S.) program.

All applicants to Doctor of Dental Surgery (D.D.S.) program at Indiana University School of Dentistry must submit an online centralized application to the Associated American Dental Schools Application Service (AADSAS) managed by the American Dental Education Association (ADEA). The information is then sent in a standardize format to all dental schools selected by the applicant.

The IUSD AADSAS 2025-2026 application cycle is open from June 3, 2025, to October 1, 2025. Applicants are encouraged to complete their AADSAS application early, as there are additional steps needed to fully complete the IUSD application.

The IUSD Dental Admissions Committee is charged with the responsibility to holistically review and select qualified candidates for admission to the D.D.S. program. The admissions committee will consider the following in review of the application; academic record (overall GPA and science GPA), Dental Admissions Test (DAT), letters of recommendations, Kira assessment, personal interview, personal statement, exposure to the field of dentistry, as well as motivation, character, personality, and ethics. Applicants will be notified of provisional offer of acceptance on December 15 of each year.

Learn more about the admissions process for the Indiana University International Dentist Program (IU-IDP), D.D.S. & M.P.H. dual degree, D.D.S. & M.B.A. dual degree, and D.D.S. & Ph.D. dual degree.

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Pre-dental Advising

Requests for pre-dental advising appointments are extended to re-applicants, non-traditional applicants, or applicants with unusual circumstances by the Indiana University School of Dentistry Office of Admissions. Appointment requests may be submitted to dsadmit@iu.edu.

New applicants are advised to discuss their academic progress with their academic advisors, or health and life sciences advisors, at their current school.

All applicants may register to attend a virtual D.D.S. information session to learn more about the program and applying to dental school.

Prerequisite coursework and pre-dental requirements must be completed before admission to the Doctor of Dental Surgery (D.D.S.) program.

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Pre-dental Requirements

Although all majors and educational backgrounds are encouraged to apply for admittance to Indiana University School of Dentistry, faculty acknowledges that a strong foundation in biology and chemistry is essential to meeting the rigors of the curriculum.

The completion of the following prerequisite coursework and bachelor's degree are required and must be completed before matriculation:

Biological Sciences
Complete a minimum of 20 semester credit hours (cr. hrs.) and 13 of those credit hours must include:

Microbiology **or** Immunology (3 cr. hrs.)
- Cell biology, Biochemistry, **or** Molecular biology (3 cr. hrs.)
- Anatomy **or** Histology with labs - Human, Mammalian, or Comparative (4 cr. hrs.)
- Physiology - Human, Mammalian, or Comparative (3 cr. hrs.)

If Anatomy and Physiology are combined, must complete Anatomy and Physiology I & II with labs (8 cr. hrs.)

Chemistry
Complete a minimum of 12 semester credit hours (cr. hrs.) and they must include:

- General Chemistry I & II with labs **or** Inorganic Chemistry I & II with labs (8 cr. hrs.)
- Organic Chemistry with labs (4 cr. hrs.)

Physics
Complete a minimum of 8 semester credit hours (cr. hrs.) and they must include these:

- General Physics I & II with labs

Social Sciences
Complete a minimum of 3 semester credit hours and must include one of these:

- Psychology **or** Communication Studies

Humanities
Complete a minimum of 3 semester credit hours and must include one of these:

- History, Literature, Philosophy, Foreign Language, **or** English Composition

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Indiana University International Dentist Program (IU-IDP)

Application Process
Please refer to the IU-IDP "How to Apply" section on the Indiana University School of Dentistry (IUSD) website for a comprehensive description of the admissions process and procedures for the Indiana University International Dentist Program (IU-IDP).

The Indiana University International Dentist Program (IU-IDP) at Indiana University School of Dentistry is a 30-month program that offers qualified graduates of international dental programs the opportunity to earn a D.D.S. degree and become licensed to practice in the United States. Applicants must submit application online through the Centralized Application for Advanced Placement for International Dentists (CAAPID) application service managed by the American Dental Education Association (ADEA).

Applicants are required to complete the Integrated National Board Dental Examination (INDBE) prior to submission of the CAAPID application. All applicants must be proficient in the English language. If your native language is not English, you are required to take the Test of English as a Foreign Language (TOEFL) and pass with a minimum score of 100. After all Kira assessments are reviewed, selected applicants move forward to interview, after all interviews are complete, a select group of applicants will be invited to take the bench exam that will be evaluated by multiple faculty members.

The IUSD Dental Admissions Committee is charged with the responsibility to holistically review and select qualified candidates for admission to the IU-IDP program. Applicants will be notified of provisional offer of acceptance no later than September 1 of each year. The IU-IDP tuition, costs and fees are integrated into a flat-rate fee uniquely designed for the program, regardless of Indiana residency status.

Learn more about the admissions process for the Doctor of Dental Surgery (D.D.S.) degree, D.D.S. & M.P.H. dual degree, D.D.S. & M.B.A. dual degree, and D.D.S. & Ph.D. dual degree.

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D.D.S. & Master of Public Health Dual Degree

Application Process
Please refer to the D.D.S. & M.P.H. "How to Apply" section of the Indiana University School of Dentistry (IUSD) website for a comprehensive description of the admissions process and procedures for the D.D.S. & M.P.H. dual degree program.

Indiana University School of Dentistry and Indiana Univeristy Richard M. Fairbanks School of Public Health jointly offer a dual degree program that allows students to earn a Doctor of Dental Surgery (D.D.S.) and a Master of Public Health (M.P.H.) in about five years.

The D.D.S. & M.P.H. coordinated curriculum allows you to begin working toward the M.P.H. degree during your third year in the D.D.S. program. Some of the D.D.S. program coursework will count toward the M.P.H. degree. Students must meet the admission requirements of both programs and apply to each separately. Students should plan to apply to the M.P.H. program during the spring semester of your second year in the D.D.S. program.

Learn more about the admissions process for the Doctor of Dental Surgery (D.D.S.) degree, Indiana University International Dentist Program (IU-IDP), D.D.S. & M.B.A. dual degree, and D.D.S. & Ph.D. dual degree.

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D.D.S./Ph.D. Dual Degree Program

Description of Program
Indiana University School of Dentistry (IUSD) offers an integrated dual degree program that combines the Doctor of Dental Surgery (D.D.S.) with a Doctor of Philosophy (Ph.D.) in Dental and Oral Health Science degree. Students who successfully complete the seven year dual degree program will receive upon graduation, both a Degree in Doctor of Dental Surgery (D.D.S.) and a Ph.D. in Dental and Oral Health Science from Indiana University.

The dual degree D.D.S./Ph.D. program will benefit students who intend to pursue a career in independent research combined with dental clinical practice. The D.D.S./Ph.D. program will also position students to successfully compete for predoctoral dual degree training programs such as the Ruth L. Kirschstein National Research Service Award (NRSA) Individual Fellowship (Parent F30).

The dual degree D.D.S./Ph.D. program consists of a total of 160 credit hours for the D.D.S. component plus 90 credit hours for the Ph.D. component, which are equivalent to the stand-alone programs taken sequentially. However, students in the dual-degree D.D.S./Ph.D. can share credit hours completed within the D.D.S. curriculum with the Ph.D. program. The amount of shared credit hours will depend on the student's Ph.D. major focus area. The sharing of course credits from the D.D.S. program thereby decreases the number of Ph.D. courses required, enabling students to enroll in a greater number of Ph.D. research credit hours compared with other dual degree programs (sandwich programs). The dual degree D.D.S./Ph.D. students also complete the required Ph.D. research rotations concurrently with the dental curriculum (D.D.S, years 1-2). In addition, dual degree students have through to the end of the year 7 of the D.D.S./Ph.D. program to complete the Ph.D. dissertation research and defense. Thus, students in the dual degree program complete Ph.D. candidacy and dissertation defense as well as the D.D.S. in fewer years compared to students who enroll sequentially in the standalone IUSD Ph.D. and D.D.S degree programs (9 years).

Admissions Requirements
Admission requirements for the combined D.D.S./Ph.D. degree program are identical to those for each separate program. Separate applications must be made to each program. Students are expected to take responsibility for learning about and meeting the admission requirements of each program which may differ from each other in application documents required, minimal standards of criteria for admission, and deadline dates for each of the separate programs. After both applications are submitted, they will be reviewed by their respective D.D.S. and Ph.D. admissions committees. Once a decision for each separate program has been made, the two committees will confer and make decisions to accept a candidate into either the stand-alone D.D.S or Ph.D. programs or admit the candidate into the combined dual degree D.D.S./Ph.D. program. Students will be notified by email of their admittance into the dual degree program.

The dual degree D.D.S./Ph.D. program is open to individuals with a B.S. degree with a minimum grade point average (GPA) of 3.0/4.0. Given the language of instruction at Indiana University is English, proficiency in reading, writing, speaking, and understanding English is essential. As per the guidelines of the IU Graduate School Indianapolis, applicants whose native language is not English should submit proof of such proficiency by the time they apply for admission. This may be done by taking the Test of English as a Foreign Language (TOEFL). Results of this test should be submitted as part of the application for admission. Applicants will be also required to provide evidence of a completed Graduate Record Examination (GRE) General Test (Quantitative, Verbal, and Analytical Writing). Students shall be advised that successful candidates typically have scores above the 70th percentile in the verbal, quantitative, and analytic writing sections. Applicants will be instructed to refer to the IU Graduate School Indianapolis bulletin for further information regarding the admission process.

Students who are already enrolled in year 1 or year 2 of the IUSD D.D.S. program who decide to pursue a Ph.D. are also eligible to apply to the D.D.S./Ph.D. program. Before applying, these students will be instructed to first discuss their interest with the Ph.D. Program Director as well as the Associate Dean of Student Affairs and Admissions to ensure they are in academic good standing. Enrolled D.D.S. students who are subsequently accepted in the dual degree D.D.S./Ph.D. program will be unenrolled from the standalone D.D.S. program and enrolled in combined dual degree D.D.S./Ph.D. program. The transition to the D.D.S./Ph.D. program will occur between the second and third year of the D.D.S. curriculum.

Individuals accepted into the IUSD D.D.S. program with advanced standing as part of the Indiana University International Dentist Program (IU-IDP) are also eligible to apply to the combined D.D.S/.Ph.D. program and should follow application and admission procedures for the separate IU-IDP and Ph.D. programs. Students in the IU-IDP program who pursue a D.D.S./Ph.D. degree are expected to graduate in five to six years, compared with over seven years for the separate programs. Based on current admissions procedures, IU-IDP students enter the D.D.S. program in the spring semester of year 2. Therefore, it is expected these students will enter the D.D.S./Ph.D. program at that time. Admissions beyond D.D.S. year 2 (IU-IDP year 1) will generally not be possible, and those individuals will be instructed to apply to the standalone IUSD Ph.D. program.

Students who enter the D.D.S./Ph.D. program will be expected to complete all the requirements of the program, and in some cases may be instructed to enroll in additional Ph.D. graduate-level didactic coursework to complete the 90 credit hours required for the Ph.D. portion of the dual degree program. It is anticipated that late-entry students will complete all rotations within the first year the program (equivalent to D.D.S. years 1-2). All individuals accepted into the D.D.S./Ph.D. program will be eligible to apply for transfer of equivalent graduate level course credits earned at another program or institution, up to a maximum of 30 credits. For students entering the dual degree D.D.S./Ph.D. program after first starting in the D.D.S. program, they will be able to share course credit hours from the D.D.S. curriculum (up to 19 credit hours) and these credits will be counted towards the 30 maximum allowable credit transfers.

Tuition and Fees The D.D.S./Ph.D. program is a seven year program (five-six years for students in the IU-IDP program who pursue a D.D.S/Ph.D. degree). Students will be expected to cover all expenses associated with the D.D.S and Ph.D. program, including tuition and fees. Several fellowships to help support Ph.D. tuition costs and student stipends may be available.

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D.D.S. & M.B.A. Dual Degree

Please refer to the D.D.S. & M.B.A. "How to Apply" section of the Indiana University School of Dentistry (IUSD) website for a comprehensive description of the admissions process and procedures for the D.D.S. & M.B.A. dual degree program.

Indiana University School of Dentistry, in partnership with the Kelley School of Business, offers the opportunity to earn a Doctor of Dental Surgery (D.D.S.) and a Master of Business Administration (M.B.A.) degree from the top-ranked Kelley School of Business Evening M.B.A. Program. The dual degree program allows students to begin working toward a M.B.A. degree during the third year of the D.D.S. program and complete both degrees simultaneously.

Students must meet the admission requirements of both programs and apply to each separately. Students should plan to apply to the M.B.A. program during the spring semester of their second year in the D.D.S. program.

Learn more about the admissions process for the Doctor of Dental Surgery (D.D.S.) degree, Indiana University International Dentist Program (IU-IDP), D.D.S. & M.P.H. dual degree, and D.D.S. & Ph.D. dual degree.

Updated April 2025

Tuition and Fees

Please refer to the "Costs & Financial Aid" section of the Indiana University School of Dentistry (IUSD) website for a comprehensive description of the tuition, fees, and types of costs associated with all academic programs, including the Doctor of Dental Surgery (D.D.S.) program.

Enrollment
Enrollment cannot be considered final until the student has been officially registered and paid the required tuition and fees by the deadlines established by the IU Indianapolis Office of the Bursar. The IU Indianapolis Office of the Bursar also provides information regarding payment methods, billing deadlines and payment procedures. The Office of the Bursar assesses monthly late fees on overdue balances.

The IUSD Office of Education and Academic Affairs block enrolls students each semester. Enrollment cannot be finalized until all previously incurred fees have been paid and students are compliant with IUSD and IU policies regarding health insurance and immunizations. Students who are not officially enrolled may not attend classes, participate in laboratories, or treat patients. The Indiana University Board of Trustees has established a late enrollment fee for students whose registration and financial obligations are not complete by the scheduled date.

Instruments
Students are required to make a substantial investment in instruments. All students are required to purchase a necessary consumables kit and rent the designated instruments as a complete set in its entirety. In addition to instruments rented by students, a separate fee is charged for use of IUSD common or shared instruments in the laboratories and the clinics. This fee is payable each semester and is based on the cost to the school to provide this service. Instrument purchase and rental fees are divided between the fall and spring semester.

Financial Aid
Information about financial aid options is sent to all incoming students upon their provisional acceptance to the D.D.S. program. A representative from the IU Indianapolis Office of Financial Aid & Scholarships meets with first-year dental students during orientation, is routinely available for counseling appointments at their IUSD office location, and may be contacted by email at dentaid@iu.edu. If it is necessary for a student to obtain a credit-based loan, students are encouraged to have their financial affairs in order before enrollment to the D.D.S. program.

Updated April 2025

Course Descriptions

First-Year Curriculum

DENT D500 Professional School Transitions (1.0 cr.) The purpose of this course is to introduce new dental students to the profession of dentistry. Each of the course topics focuses on elements of the practice of dentistry that have a professional dimension. As such, you will have your first experience in the patient care environment of a dental school clinic. You will learn about the development of psychomotor skills in your preclinical laboratory courses. Additionally, you will learn study skills to help you be successful in a rigorous professional school curriculum. Lastly, in collaboration with your colleagues, you will write a mission statement enumerating the expectations you have of yourselves as a professional community.

DENT D501 Introduction to Patient Care I (1.0 cr.) This course provides students with the opportunity to apply, in a clinical care setting, the didactic content they are learning in the first year of the predoctoral curriculum. The course consists of lectures, laboratory exercises and partnered patient care experiences. Students will gain experience in preparation and disinfection of the dental operatory, use of personal protective equipment, patient data collection, use of the electronic health record system, conducting a caries risk assessment, providing effective patient education, and fluoride application. Successful completion of this course is a prerequisite for the second semester Introduction to Patient Care course.

DENT D502 Introduction to Patient Care II (1.0 cr.) Continuation of Introduction to Patient Care I, with emphasis on application of risk assessment, and preventive therapies in a clinical setting.

DENT D503 Fundamentals of Behavioral Science (2.0 cr.) This course takes a relationship-centered care perspective in teaching and reinforcing foundational concepts of behavioral science.

DENT D504 Dental Public Health (1.0 cr.) This course provides an introduction to dental public health with emphasis on the role of dentistry in our local, national and international communities.

DENT D505 Fundamentals of Ethics and Professionalism (1.5 cr.) In this course you will learn about the principles of ethics and professionalism as they relate to the profession of dentistry. You will be introduced to ethical principles and values, as well as a brief history of the development of dentistry as a profession. You will explore ethical issues related to dental school and dentistry and the professional responsibilities and ethical standards involved in the doctor-patient relationship. Additionally, you will actively participate in sessions exploring ethical issues related to communication in healthcare.

DENT D506 Evidence-based Dentistry and Information Literacy (1.0 cr.) In this course, you will begin to develop information literacy skills, strategies and methods of information acquisition enabling a clinical practitioner to assess the value and validity of the information. These skills will enable you to understand and begin to appropriately implement the practice of evidence-based decision-making in caring for your patients.

DENT D507 Ergonomics and Fourhanded Dentistry (1.0 cr.) This course is designed to emphasize the roles of the dental operator and dental assistant in four-handed dentistry. Didactic content and pre-clinical activities include basic asepsis procedures, identification and utilization of instruments and equipment, positioning of the dental team and patient, instrument transfer, chairside assisting, oral evacuation, and proper dental ergonomics.

DENT D509 Introduction to Pharmacology (0.5 cr.) This course will present introductory pharmacology concepts. Topics such as pharmacodynamics, pharmacokinetics, popular medications, prescription writing, and medical

terminology will be the focus of this course. The information presented will be foundational to student success in future courses and will prepare learners to transition into the role of student practitioners.

DENT D510 General Microbiology, Infectious Disease, & Antimicrobial Therapy (3.0 cr.) This course is designed to expand the students' understanding of microbiology and infectious diseases and to complement student learning in concurrent biomedical and dental sciences courses. It prepares the student for the Systems Approach to Biomedical Sciences (SABS) courses in the following semester. The principles of pharmacology are introduced, including the basics of pharmacodynamics (what the drugs do to the body), pharmacokinetics (what the body does to the drug) and therapeutics (the use of a drug or combination of drugs to treat disease).

DENT D511 Head and Neck Anatomy (2.0 cr.) This course focuses on Human Gross Anatomy (Macroscopic Anatomy) of the head and neck. Students will learn the locations and physical relationships of anatomical structures in the head and neck and be able to critically analyze clinical cases. This knowledge will provide the anatomical basis for specific diagnostic and treatment procedures currently used in dentistry and medicine.

DENT D513 Head and Neck Anatomy Dissection Lab (1.0 cr.) This course focuses on Human Gross Anatomy (Macroscopic Anatomy) of the head and neck through the process of dissection. Students will build upon their knowledge of locations and physical relationships of anatomical structures in the head and neck during this laboratory course.

DENT D514 Normal Oral Histology (2.0 cr.) The Normal Oral Histology course is designed to facilitate students' learning of the basic microscopic anatomy of the human body and apply that foundation to the microscopic anatomy of the oral region. Students will learn the general methods of microscopic examination of tissues and apply it to the study of the oral region. This course provides a foundation for understanding physiology, pathology, pharmacology, oral pathology, periodontology and related clinical courses.

DENT D515 Systems Approach to Biomedical Sciences I (3.0 cr.) This is part I of a two-semester sequence that presents basic sciences organized into specific organ systems. This course presents the first seven modules out of the total of eleven modules in the series. Each organ system module is designed to cover the development, structure, function, pathology and therapy of each system. Critical thinking skills are emphasized.

DENT D516 Systems Approach to Biomedical Sciences II (3.0 cr.) This is Part II of a course series which presents basic sciences information organized into specific organ systems. SABS II presents modules that are organized to discuss the development, structure, function, pathology and therapy for each organ system. Critical thinking skills are emphasized throughout.

DENT D521 Nonsurgical Periodontics (2.0 cr.) This course familiarizes the student with the principles and skills required to provide nonsurgical periodontal therapy.

DENT D530 Tooth Morphology Lecture (1.0 cr.) The purpose of Tooth Morphology is to introduce students to the anatomical forms of the human dentition. In the lecture component of the course, students will learn to recognize normal tooth forms, identify permanent and deciduous teeth both individually and within normal jaw relationships, and describe the normal eruption sequence of primary and permanent teeth. Students will be expected to use appropriate nomenclature and terminology when describing teeth, parts of teeth, or other aspects of the orofacial complex.

DENT D531 Tooth Morphology Lab (1.5 cr.) In the Tooth Morphology Lab, students will begin to develop the manual skills necessary for the practice of Dentistry. Students will be required to reproduce normal tooth forms in wax. Wax is easily shaped and sculpted and is used as an intermediate stop in the fabrication of some types of restorations.

DENT D532 Single Tooth Direct Restorations Lecture (1.0 cr.) Single Tooth Direct Restorations will introduce the student to the art and science of Operative Dentistry. Operative Dentistry has been recognized as the foundation of dentistry and the basis from which most other aspects of dentistry begin. Operative Dentistry involves the diagnosis, treatment, prognosis and prevention of defects of the teeth. Such treatment should result in the restoration or maintenance of proper tooth form, function, and esthetics while maintaining the physiological integrity of the teeth in relationship with the adjacent hard and soft tissue. It includes direct patient care through diagnosis and prevention of caries and other dental defects followed by treatment planning of restorative options for these areas. This course will focus on treatment options that include executing various single tooth direct cavity preparations and subsequently restoring them with the appropriate dental restorative materials.

DENT D533 Single Tooth Direct Restorations Lab (2.0 cr.) The Single Tooth Direct Restorations Lab course is intended to help students develop the manual skills necessary to prepare and restore the diseased or abnormal tooth to proper form and function. The preparation and restoration of a tooth requires the dentist to practice applied human biology and microbiology, use principles of mechanical engineering, possess a high degree of technical skills, and demonstrate artistic ability. Manual skills are a very important component of the proper preparation and restoration of teeth and are the foundation to the practice of dentistry. As such, this lab will require students to execute various single tooth direct preparations and restorations.

DENT D534 Dental Materials (2.0 cr.) This course presents the basics of materials science needed by the general dental practitioner. The properties of materials: metals, ceramics, polymers, and composites will be related to their structure using basic laws and principles from physics, chemistry and engineering science. These properties will be related to the performance of the materials in dental applications. While no clinical experience will be gained in this course, students are prepared for understanding the use of specific dental materials in concurrent and later dental courses.

DENT D535 Single Tooth Indirect Restorations Lecture (1.5 cr.) The Single Tooth Indirect Restorations course is

a direct continuation of Single Tooth Direct Restorations, and students will be responsible for building upon the information and skills learned in that course. Students will be expected to understand the normal morphologic and physiologic characteristics of the dento-facial complex and the etiology, diagnosis and prevention of dental caries within the context of indirect restoration of single teeth.

DENT D536 Single Tooth Indirect Restorations Lab (2.5 cr.) The purpose of the Single Tooth Indirect Laboratory is to apply the information acquired in D535 to hand skills developed through tooth preparation and the fabrication of indirect restorations. Students will be expected to become competent in indirect preparations and restorations including inlays, onlays, gold crowns and ceramic crowns. Students will be trained using computer aided design/computer aided manufacturing technology as well as more traditional methods of fabrication.

DENT D537 Introduction to Operative Dentistry (0.5 cr.) Introduction to Operative Dentistry will introduce the student to the art and science of Operative Dentistry which includes use of hand-pieces and rotary instruments, dental terminology, dental histology as it relates to single tooth direct preparations and restorations, cavity classifications, use of rubber dam and other isolation methods, preventive measures such as fluoride and pit & fissure sealants, and utilization of hand instruments to refine the cavity preparation and place direct restorations. After mastering this information, the student should be able to utilize this knowledge for single tooth direct preparations and restorations. Operative Dentistry has been recognized as the foundation of dentistry and the basis from which most other aspects of dentistry begin. Operative Dentistry involves the diagnosis, treatment, prognosis and prevention of defects of the teeth. Such treatment should result in the restoration or maintenance of proper tooth form, function, and esthetics while maintaining the physiological integrity of the teeth in relationship with the adjacent hard and soft tissue utilizing the basics acquired in D537- Introduction to Operative Dentistry. The preparation and restoration of a tooth requires the dentist to practice applied human biology and microbiology, use principles of mechanical engineering, possess a high degree of technical skills, and demonstrate artistic ability. The student will utilize the background knowledge obtained in Introduction to Operative Dentistry, Tooth Morphology, Dental Materials, and Gnathology to prepare and restore the diseased or abnormal tooth to proper form and function.

DENT D538 Fundamentals of Cariology (1.0 cr.) This course introduces the foundational knowledge of dental caries. Emphasis will be given to the etiology, pathogenesis and modifying factors of dental caries and hard tissue conditions, as well as caries lesion detection, assessment and diagnosis as fundamental steps for caries management.

DENT D542 Removable Prosthodontics I (3.0 cr.) Removable Prosthodontics I is the first in a series of three courses preparing students for the examination, diagnosis and treatment of the edentulous patient. During the laboratory portion of the course, students will be introduced to the fabrication of complete dentures, immediate dentures and overdentures.

DENT D543 Gnathology Lab (2.0 cr.) Gnathology builds upon the knowledge and skills that were learned during the Tooth Morphology course. The student's knowledge of tooth morphology will be adapted to the anatomical, physiological, and biomechanical requirements of the stomatognathic system. This course is intended to serve as the basis for a curriculum that integrates relevant knowledge of stomatognathic function and stability with all dental diagnosis and treatment procedures. During the Gnathology laboratory sessions, the student will learn to apply knowledge of head and neck anatomy and biomechanical principles of jaw motion to the maintenance and restoration of the stomatognathic system, assuring proper functions.

DENT D550 Dental Radiography (2.0 cr.) Examines the normal form and function of the oral and maxillofacial complex, with emphasis on the fundamentals of intraoral imagining techniques and radiation safety.

DENT D551 Oral Diagnosis and Treatment Planning (1.0 cr.) Introduces the student to the methods of the diagnostic process, including patient assessment and evaluation, interpretation of findings and accurate recording of findings in the electronic health record. Students will be formulating and presenting a treatment plan that addresses the patient's dental needs in an orderly and appropriate sequence.

DENT D560 Local Anesthesia (1.0 cr.) This course prepares the student for the clinical administration of local anesthetic drugs. Course reviews the neurophysiology of local anesthetic action, and the pharmacology of commonly used anesthetic medications. Introduced students to the armamentarium used to deliver local anesthetic, and the techniques of maxillary, mandibular and supplemental injections. Presents local and systemic complications and the management of those complications.

Second-Year Curriculum

DENT D600 Clinical Procedures (2.5 cr.) This course is the continuation of the Introduction to Patient Care courses in the first year of the DDS curriculum. Students participate in a variety of clinically focused educational experiences in the IUSD clinics which include, but are not limited to, observations, assisting, and direct patient care.

DENT D601 Applied Clinical Dentistry (1.0 cr.) The purpose of the Applied Clinical Dentistry courses is to prepare students for the comprehensive care of patients by building upon foundational knowledge and experience gained in the first year of the program. Students will have opportunities for in depth training on document patient assessment and recording data in the electronic health record, with special emphasis on proper documentation of medications, coding and compliance. Additionally, students will be introduced to the foundations of comprehensive treatment planning and have opportunities for expanded laboratory techniques, preclinical exercises, special topics in patient care, and limited direct patient care.

DENT D602 Applied Clinical Dentistry (1.0 cr.) The purpose of the Applied Clinical Dentistry course is to prepare students for the comprehensive care of patients by building upon foundational knowledge and experience gained in the first three semesters of the program.

Students will have opportunities for in-depth training on documentation, patient assessment, and recording data in the electronic health record, with special emphasis on proper documentation of medications, coding, and compliance. Students will have opportunities to participate Emergency Clinic, Screening Clinic, and to provide limited direct patient care in their Comprehensive Care Clinic.

DENT D603 Relationship-centered Care: Behavioral Science, Ethics and Professionalism (2.0 cr.) This course takes a relationship-centered care perspective in teaching and reinforcing foundational concepts of healthcare communication theory, humanism, civility, ethics, and professionalism.

DENT D615 Systems Approach to Biomedical Sciences III (3.0 cr.) This is Part III of a course series which presents basic sciences information organized into specific organ systems. SABS III presents modules that are organized to discuss the development, structure, function, pathology, and therapy for each organ system. Critical thinking skills are emphasized throughout.

DENT D630 Clinical Applications of Cariology and Operative Dentistry I (1.0 cr.) The purpose of the Clinical Applications of Cariology and Operative Dentistry Concepts course is to reinforce and build upon the material introduced in D520 Risk Assessment, Prevention, and Early Management of Dental Disease, D532/D533 Single Tooth Direct Restorations and D535/536 Single Tooth Indirect Restorations courses. Students will be expected to understand the continuum of caries management from detection and diagnosis to surgical intervention, with an emphasis on clinical relevance and application. Course lecture topics will include caries detection and diagnosis, risk assessment, remineralization, erosion, cavity liners and bases, pulp therapy, secondary caries, ceramic restorations, posterior resin composites, and restoration longevity. Laboratory exercises include caries detection, risk assessment, preventive techniques, and anterior direct esthetic restorations.

DENT D641 Removable Prosthodontics II (3.0 cr.) The Removable Prosthodontic courses continue the preparation of the student for patient care by enhancing the student's foundational and clinical knowledge base and continuing their development of manual skills. The purpose of the Removable Prosthodontics II course is to build upon the foundational content presented in Removable Prosthodontics I by continuing to prepare students for the examination, diagnosis, treatment planning and treatment of the edentulous patient requiring uncomplicated treatment. Accordingly, students will be exposed to didactic and laboratory experiences, which will enable them to achieve the needed knowledge and skills.

DENT D642 Removable Prosthodontics III (3.0 cr.) This is the third in the series of Removable Prosthodontics courses designed to prepare students for patient care by enhancing their foundational and clinical knowledge base and continuing their development of manual skills. The purpose of this course is to introduce students to the basic biomechanical concepts and mechanisms relevant to removable partial denture design and fabrication.

DENT D645 Fixed Prosthodontics I (5.0 cr.) The student's knowledge of tooth morphology and occlusion, dental materials and single tooth indirect procedures will be applied to the dentulous patient requiring more extensive treatment. This portion of the curriculum will also integrate basic science concepts into the treatment of the patient. From the information learned prior to and during this course the student will be able to diagnose, treatment plan and treat the uncomplicated fixed prosthodontic patient. During the laboratory sessions of Fixed Prosthodontics I, the student will learn to apply the knowledge of tooth preparation, indirect procedures, oral anatomy, biomechanical principles of jaw motion and dental material concepts to restore the stomatognathic system, assuring proper function and esthetics.

DENT D646 Fixed Prosthodontics II (5.0 cr.) A continuation of Fixed Prosthodontics I, this course further develops students' knowledge of tooth morphology, occlusion, dental materials and indirect procedures in the context of a dentulous patient requiring more extensive treatment. The laboratory component of the course will focus on tooth preparation, indirect procedures, oral anatomy, biomechanical principles of jaw motion and dental material concepts to restore the stomatognathic system, assuring proper function and esthetics.

DENT D650 Radiographic Interpretation (1.0 cr.) This course increases the skills of the dental student in interpreting intraoral and extraoral diagnostic images with emphasis on identifying normal radiographic anatomy, imaging artifacts and commonly occurring oral abnormalities and diseases.

DENT D651 Oral and Maxillofacial Pathology I (2.0 cr.) This course continues the concepts of normal form and function of the oral and maxillofacial complex presented earlier in the curriculum. Disease processes that affect this region and their underlying pathophysiology will be discussed.

DENT D652 Oral and Maxillofacial Pathology II (2.0 cr.) This course is a continuation of D651 Oral and Maxillofacial Pathology I, and further addresses the concepts of normal form and function of the oral and maxillofacial complex presented earlier in the curriculum. Disease processes affecting this region and their underlying pathophysiology will be discussed.

DENT D660 Fundamentals of Oral and Maxillofacial Surgery (1.0 cr.) Fundamentals of Oral and Maxillofacial Surgery is the didactic introduction to the surgical management of the dental patient. The course is designed to provide the dental student with the basic knowledge to perform minor oral and maxillofacial surgical procedures. Course material will be presented in a lecture format.

DENT D661 Fundamentals of Clinical Medicine (2.0 cr.) This course has been established to prepare the dental student for the practice of clinical dentistry as it applies to the medically complex patient. The process of acquiring a thorough medical history, identifying at-risk patients, application of pharmacology related to and co-existing disease and the proper management of medical emergencies will be explored. Information will be presented using several different formats. (1) Material will be provided in lecture format, (2) material will be provided through "on-line" presentations, (3) material will be presented in a case format, and (4) there will be required texts with assigned reading.

DENT D670 Endodontics Lecture (1.0 cr.) This course is an introduction to basic endodontic procedures and related biological principles. Lectures and laboratory assignments relate to etiology, diagnosis, prevention, and treatment of disease and injuries of the pulp and periapical tissues to prepare students to treat endodontic patients in IUSD clinics. Didactic, laboratory and clinical instruction in endodontics has as its goals the acquisition of clinical knowledge and its biological basis and the acquisition of clinical skills. In presenting this material it is understood that supplementary information and skills will be included in the overall dental curriculum. At the completion of pre-doctoral instruction, the graduating dentist should be well qualified to pass the endodontic portion of the National Board Examination.

DENT D671 Endodontics Lab (1.0 cr.) This course is an introduction to basic endodontic procedures and related biological principles. Laboratory assignments relate to etiology, diagnosis, prevention, and treatment of disease and injuries of the pulp and periapical tissues to prepare students to treat endodontic patients in IUSD clinics. Didactic, laboratory and clinical instruction in endodontics has as its goals the acquisition of clinical knowledge and its biological basis and the acquisition of clinical skills. In presenting this material it is understood that supplementary information and skills will be included in the overall dental curriculum. At the completion of pre-doctoral instruction, the graduating dentist should be well qualified to pass the endodontic portion of the National Board Examination. The scope of the course includes preparing the student to understand, recognize, diagnose and successfully treat pulpally involved or potentially pulpally involved teeth.

DENT D680 Orthodontics (2.0 cr.) The purpose of this course is to introduce IDP students to the specialty of orthodontics and its role in total patient care. The lectures and laboratory projects will prepare students for the clinical treatment of patients needing limited orthodontic tooth movement.

DENT D690 Pediatric Dentistry (2.5 cr.) The purpose of the Pediatric Dentistry Didactic and Technique course is to present the fundamentals of diagnosis and treatment modalities for the management of the young patient including the healthy child and those with physical or intellectual disabilities. This course is a prerequisite for the Pre-doctoral Pediatric Dentistry Clinic rotation.

International Dental Program Courses

DENT T642 IDP Transitions (4.0 cr.) This course is designed for students newly admitted to the International Dental Program (IDP) and is intended to assist students with acclimating and transitioning into the program. Students will participate in a variety of orientation and educational activities including introductions/reviews of: navigating university systems and resources, intercultural communication, axiUm electronic health record training, Ethics and Professionalism, Behavioral Science, Evidence-based Dentistry, Local Anesthesia, Radiology Technique, Cariology, and hand skill diagnostics.

DENT T643 Dental Sciences for IDP (6.0 cr.) The purpose of this course is to assist students enrolled in the IUSD International Dental Program in the development and acquisition of the knowledge, psychomotor skills, critical thinking, problem solving, communication, professional conduct, behavior and self-assessment skills necessary to provide optimal dental treatment to their patients. The course consists of several discipline specific modules each with specific learning objectives and methods of assessment. At the completion of Dental Sciences for IDP, students should be able to: perform to a clinically acceptable standard those techniques and procedures presented in the component modules, gather diagnostic information, diagnose and treatment plan for the uncomplicated dental patient, and self-assess performance and/or simulated patient treatment quality and make appropriate modifications.

DENT T644 IDP Critical Thinking Skills (1.0 cr.) IDP Critical Thinking Skills will utilize modules to provide students in the International Dentist Program with required foundational knowledge, skills, and values found in the traditional DDS curriculum, and support the development and enhancement of critical thinking skills.

DENT T680 Orthodontics for IDP (0.5 cr.) The purpose of this course is to introduce the IDP student to the specialty of orthodontics and its role in total patient care. The lectures will introduce students to basic orthodontic terminology, diagnostic techniques, and methods of managing common malocclusions. The laboratory will provide students with an opportunity to utilize different orthodontic materials in order to complete diagnostic records; trace and measure lateral cephalometric head - plates; perform an orthodontic clinical evaluation; become familiar with diagnosis and treatment planning procedures; construct retainers, and place orthodontic appliances. This course will prepare the student for the clinical treatment of patients needing limited orthodontic tooth movement.

Third-Year Curriculum

DENT D700 Clinical Procedures (4.5 cr.) The purpose of the Clinical Procedures Course is to provide clinical patient experiences to students during the summer between the D2 and D3 years. Students will begin the process of comprehensive patient care by participating in screening clinics, diagnosis and treatment planning and the treatment of assigned patients. This course will begin to guide students through their development of the knowledge, skills and values needed for the competent independent practice of dentistry.

DENT D703 Applied Clinical Patient Management I (GLA) (1.0 cr.) The purpose of the Applied Clinical Patient Management course is to provide an opportunity for students to increase their knowledge and skill in treatment planning and patient management using specially designed patient scenarios. Through mentor facilitation of the scenario presentation and discussion, students improve their ability to identify and apply evidence-based information required to appropriately manage a patient.

DENT D704 Applied Clinical Patient Management II (1.0 cr.) The purpose of the Applied Clinical Patient Management course is to provide an opportunity for students to increase their knowledge and skill in treatment planning and patient management using specially designed patient scenarios. Through mentor facilitation of the scenario presentation and discussion, students improve their ability to identify and apply evidence-based information required to appropriately manage a patient.

DENT D705 Practice Administration I (1.0 cr.) The purpose of the Practice Administration I course is to introduce dental students to the principles and philosophy of practice administration including essential financial concepts, employment options, a variety of practice models, and to provide an opportunity for identifying those business skills which will enable them to become functional practitioners in their chosen practice setting. Topics which will be addressed over the course of two semesters include: Basic Financial Literacy, Trends in Dentistry, Career Opportunities, Use of Consultants, Obtaining Financing, Associateships, Purchasing a Practice, Staffing and Staff Management, Patient Scheduling/Recall Records, and Financial Operations.

DENT D707 Comprehensive Care and Patient Management I (1.0 cr.) Comprehensive Care and Patient Management I is the first in a series of four clinical courses focused on the comprehensive care and management of dental patients. This course emphasizes the clinical application and integration of knowledge about the principles of basic and dental sciences attained in the first two years of the curriculum. Students will participate in a variety of clinical experiences and will be expected to consider the comprehensive treatment possibilities for individual patient care situations, from diagnosis and treatment planning through maintenance.

DENT D708 Comprehensive Care and Patient Management II (1.0 cr.) Comprehensive Care and Patient Management II is a continuation of D707 and is the second in a series of four clinical courses focused on the comprehensive care and management of dental patients. This course emphasizes the clinical application and integration of knowledge about the principles of basic and dental sciences attained in the first two years of the curriculum. Students will participate in a variety of clinical experiences and will be expected to consider the comprehensive treatment possibilities for individual patient care situations, from diagnosis and treatment planning through maintenance.

DENT D710 Applied Biomedical-Clinical Sciences Case Conference (1.0 cr.) The purpose of this course is to prepare students for the integration and application of biomedical, behavioral, and clinical sciences which is essential for comprehensive evidence-based patient care. Biomedical and behavioral sciences topics will be reinforced through the critical analysis of patient cases and other methods of integration.

DENT D711 Pharmacotherapeutics I (1.0 cr.) This is the first of two courses designed to broaden student knowledge of pharmacology and therapeutics. Pharmacotherapeutics I will focus on the most common medications dentists encounter in clinical practice, with a focus on minimizing risk of drug interactions. It is expected students will have knowledge of the physiological systems and pathophysiology of disease states, in particular the disease states characteristics of medically complicated patients.

DENT D720 Clinical Periodontics I (2.0 cr.) Clinical Periodontics I is the first of two clinical courses, the goals of which are to teach basic periodontal concepts and the fundamentals of periodontal surgery and to develop clinical competency. Students will assist graduate students during surgical procedures and, once capable, may perform periodontal surgeries on their own patients.

DENT D721 Surgical Periodontics I (1.0 cr.) This is an introductory course to periodontal surgical procedures. This course will familiarize the student with various surgical procedures that can be utilized when patients have periodontal defects that have not responded to non-surgical periodontal procedures and/or may benefit from surgical procedures to facilitate restorative dental needs. It will be important for the student to understand the indications and contraindications for the various surgical procedures so that the optimal clinical outcome may be achieved for the patient.

DENT D722 Surgical Periodontics II (1.0 cr.) The purpose of this course is to familiarize the dental student with advanced periodontal surgical procedures. By knowing the indications and contraindications for periodontal surgical therapy, the dental student will be able to discuss periodontal treatment modalities with patients and understand the referral process when addressing specific periodontal diseases and conditions.

DENT D731 Advanced Restorative Dentistry I (1.0 cr.) The purpose of this course is to explore restorative principles in greater depth, review basic principles in light of the third-year students' clinical experiences. It updates information from the restorative literature since their first-year experience. Restorative materials' properties are reviewed in the context of clinical applications. Material choice and handling techniques are taught primarily through case presentations of actual patients. Rationale for material choice and techniques in each case is reviewed in depth and supported with literature when available.

DENT D732 Advanced Restorative Dentistry II (1.0 cr.) The purpose of this course is to explore restorative principles in greater depth, review basic principles in light of the third-year students' clinical experiences. It updates information from the restorative literature since their first-year experience. Restorative materials' properties are reviewed in the context of clinical applications. Material choice and handling techniques are taught primarily through case presentations of actual patients. Rationale for material choice and techniques in each case is reviewed in depth and supported with literature when available.

DENT D733 Dental Materials (1.0 cr.) This course is designed to broaden student knowledge of dental materials. The dental materials that are in use at IUSD are but a small fraction of those that are available for purchase. One purpose of this course is to advance student knowledge and skill in material selection. In this way, the risk to patients due to poor materials selection will be minimized. Furthermore, the cost of dental care can be better managed.

DENT D735 Cariology and Operative Dentistry Clinic I (2.5 cr.) Cariology and Operative Dentistry Clinic I is the first in a series of four courses that provides students with supervised clinical experiences in Cariology and Operative Dentistry. This course will enable the student, upon graduation, to be competent and proficient in the diagnosis and management of dental caries and other dental conditions requiring non-surgical (preventive) treatment or direct restorative care using dental amalgam and resin

composite, which are required experiences for graduation, and are evaluated by the Caries Risk Assessment Competency in the 3rd year, and the Operative Dentistry Clinical Competency exam in the 4th year. Additionally, students may obtain clinical experiences involving glass ionomer, cosmetic resin bonding, sealants, direct and indirect pulp therapy, control of rampant caries, provisional and sedative restorations, repair of castings, and direct gold.

DENT D739 Health Promotion and Disease Prevention Rotation (0.5 cr.) The IUSD service programs (Community-based Dental Education) aim at connecting meaningful community service experiences with academic and personal growth, as well as civic responsibility. The Health Promotion and Prevention Rotation (SEAL INDIANA) is a part of IUSD 3rd year dental student rotations and a requisite to be eligible towards the Community-based Dental Education Competency. This rotation is based on service-learning methodology and includes broad preparation, and reflection to help students understand the role of dentistry in the community, the nation and the world. The rotation includes a 3 day visit to community sites aimed at preparing future dentists for the growing diversity in the communities of Indiana and other states.

DENT D741 Advanced Occlusion (1.0 cr.) The Advanced Occlusal Studies course is designed to provide students with a clinical orientation to the principles learned in the Gnathology and Complete Dentures courses. This course will provide a historical perspective of the concepts of occlusion and will enable students to enhance their technical skills.

DENT D742 Introduction to Dental Implants (2.0 cr.) The purpose of Introduction to Dental Implants is to provide third-year dental students with the opportunity to become familiar with implant dentistry. Students will be introduced to foundational concepts that will prepare them to recognize when dental implant is an appropriate treatment method and to determine when referral is needed.

DENT D744 Clinical Prosthodontics (1.0 cr.) D744 Clinical Prosthodontics is the first series of clinical courses providing clinical instruction and practice in fixed, removable, and dental implant prosthodontics. Students will develop the knowledge, skills, and values necessary to diagnose, treatment plan, and treat patients requiring dental prostheses.

DENT D751 Clinical Radiology I (0.5 cr.) Students will gain clinical experience in obtaining and interpreting diagnostic imaging surveys for their patients. In providing care for their patients, students will be expected to select appropriate radiographic surveys, obtain diagnostic images, and demonstrate competence in the interpretation of intraoral and panoramic images in terms of anatomic structures, errors, artifacts, caries, and pathologic processes.

DENT D752 Clinical Radiology II (1.0 cr.) Clinical Radiology students will begin implementing CBCT, virtual planning concepts, and 3D printing into the clinical radiology rotation. Students are expected to understand the fundamentals of virtual planning, 3D design, 3D printing and also how to apply this concept into different specialties.

DENT D753 Oral and Maxillofacial Pathology: Clinical Pathologic Conference I (1.0 cr.) This course builds on the basic knowledge gained in the Oral and Maxillofacial Pathology course series to enable the student to place the knowledge of oral pathology in the context of clinical presentations of patients.

DENT D754 Oral and Maxillofacial Pathology: Clinical Pathologic Conference II (1.0 cr.) This course is a continuation of D753 Oral and Maxillofacial Pathology I, and further builds on the basic knowledge gained in the Oral and Maxillofacial Pathology course series to enable the student to place the knowledge of oral pathology in the context of clinical presentations of patients.

DENT D755 Orofacial Pain and Dental Sleep Medicine (1.0 cr.) This course emphasizes proper diagnosis of various orofacial pain manifestations and appropriate treatment approaches. It is designed to provide learners with integrated biomedical and clinical knowledge to assist them in understanding the dentist's role in managing complex orofacial pain disorders. The course also provides an introduction to obstructive sleep apnea.

DENT D760 Pain and Anxiety Management (1.0 cr.) Pain and anxiety control is a fundamental skill for successful dental practice. A competent dentist should be able to select an appropriate method of pain and anxiety control for each patient under his/her care. The purpose of this course is to acquaint the student with the basic didactic theories of pain and anxiety control for managing patients in contemporary dental practice.

DENT D761 Advanced Oral Surgery Concepts (1.0 cr.) The Advanced Oral Surgery Concepts course exposes the student to advanced aspects of oral and maxillofacial surgery, the dental specialty that is involved in the diagnosis, management and treatment of injuries, deformities, and pathology of the maxillofacial region. The general dentist is the first diagnostician who may be involved in these conditions and as such should have a basic knowledge to diagnose and refer, and the ability to follow the progression of their patient's care once the referral is made. This requires knowledge of the various interventions provided by the oral and maxillofacial surgeon. The course will provide the student with an understanding of the various management interventions that may be used by an oral and maxillofacial surgeon.

DENT D765 Oral Surgery Clinic Rotation I (0.5 cr.) Oral Surgery Rotation I is structured for students to gain clinical experience in basic oral and maxillofacial surgery. All predoctoral students will participate in clinical experiences each semester in the Oral Surgery Clinic. The clinical experiences will provide the opportunity for students to use their knowledge from the didactic curriculum and apply it to patient care.

DENT D766 Oral Surgery Clinic Rotation II (0.5 cr.) Oral Surgery Rotation II is a continuation of the Oral Surgery Rotation I course. The course is structured for students to gain clinical experience in basic oral and maxillofacial surgery. All predoctoral students will participate in clinical experiences each semester in the Oral Surgery Clinic. The clinical experiences will provide the opportunity

for students to use their knowledge from the didactic curriculum and apply it to patient care.

DENT D771 Clinical Endodontics I (0.5 cr.) The purpose of Clinical Endodontics I is to provide students with initial clinical exposure to endodontics. Students will participate in lecture and laboratory exercises pertaining to isolation, anesthetic, and diagnostic techniques related to endodontic diagnosis and treatment.

DENT D772 Clinical Endodontics II (0.5 cr.) Clinical Endodontics II is a continuation of Clinical Endodontics I, and provides students with initial clinical exposure to endodontics. Students will participate in lecture and laboratory exercises whereby clinical skills such as accessing, filing, and obturation of extracted and artificial teeth will be conducted. Furthermore, advanced clinical armamentarium including rotary instrumentation, ultrasonic use, various obturation methodologies and use of microscopic observation for treatment will be completed. Lastly, students will gain exposure to endodontic care and treatment, which will include topics related to incision and draining procedures, pulpotomy/ pulpectomy procedures and management of traumatic cases.

DENT D790 Pediatric Dentistry Clinical Rotation I (0.5 cr.) The purpose of Pediatric Dentistry Clinical Rotation I is to prepare the student dentist for the care of the oral health of the child patient. This course is a supervised clinical experience in the practice of dentistry for children subsequent to the lecture and technique course. Satisfactorily completing the didactic and technique course is a prerequisite. It is comprised of clinical experience in the diagnosis, treatment planning, caries risk assessment and caries risk management with preventive measures and typical treatment procedures for typical children.

DENT D791 Pediatric Dentistry Clinical Rotation II (0.5 cr.) The purpose of Pediatric Dentistry Clinical Rotation II is to prepare the student dentist for the care of the oral health of the child patient. This course is a supervised clinical experience in the practice of dentistry for children subsequent to the lecture and technique course. Satisfactorily completing Pediatric Dentistry Clinical Rotation I is a prerequisite. It is comprised of clinical experience in the diagnosis, treatment planning, caries risk assessment and caries risk management with preventive measures and typical treatment procedures for typical children.

Fourth-Year Curriculum

DENT D800 Clinical Procedures (4.5 cr.) The purpose of the Clinical Procedures Course is to provide clinical patient experiences to students during the summer between the D3 and D4 years. Students continue comprehensive patient care by participating in screening clinics, diagnosis and treatment planning, treatment of assigned patients, and participating in assigned rotations. This course will continue to guide students through their development of the knowledge, skills and values needed for the competent independent practice of dentistry.

DENT D801 Dental Rounds III (1.0 cr.) In fourth-year Dental Rounds, students will participate in weekly seminars with Clinic Directors to discuss clinical problems in the practice of dentistry. Students will be expected to assess their original treatment plan of a patient of record and determine whether treatment was properly sequenced, what positive and negative outcomes derived from actual treatment, and what maintenance and/or future treatment the patient might require. Students will consider relevant biobehavioral, biomedical, ethical and current best evidence related to patient treatment. In the fourth-year, students will choose one of their case presentations to present as their Outcomes of Treatment Competency exam.

DENT D802 Dental Rounds IV (1.0 cr.) In fourth-year Dental Rounds, students will participate in weekly seminars with Clinic Directors to discuss clinical problems in the practice of dentistry. Students will be expected to assess their original treatment plan of a patient of record and determine whether treatment was properly sequenced, what positive and negative outcomes derived from actual treatment, and what maintenance and/or future treatment the patient might require. Students will consider relevant biobehavioral, biomedical, ethical and current best evidence related to patient treatment. In the fourth-year, students will choose one of their case presentations to present as their Outcomes of Treatment Competency exam.

DENT D805 Jurisprudence (1.0 cr.) The Jurisprudence course will expose students to legal principles that impact dentistry and business. Additionally, this course will familiarize students with the Indiana Dental Law as promulgated by the Indiana General Assembly and Indiana Dental Board.

DENT D807 Comprehensive Care and Patient Management III (3.5 cr.) Comprehensive Care and Patient Management III is the third in a series of four clinical courses focused on the comprehensive care and management of dental patients. This course emphasizes the clinical application and integration of knowledge about the principles of basic and dental sciences attained in the first two years of the curriculum. Students will participate in a variety of clinical experiences, and will be expected to consider the comprehensive treatment possibilities for individual patient care situations, from diagnosis and treatment planning through maintenance.

DENT D808 Comprehensive Care and Patient Management IV (3.5 cr.) Comprehensive Care and Patient Management IV is the fourth and final clinical course in the DDS curriculum focusing on the comprehensive care and management of dental patients. This course emphasizes the clinical application and integration of knowledge about the principles of basic and dental sciences attained in the first two years of the curriculum. Students will participate in a variety of clinical experiences and will be expected to consider the comprehensive treatment possibilities for individual patient care situations, from diagnosis and treatment planning through maintenance.

DENT D810 Intramural Electives (1.0 cr.) Intramural electives provide dental students opportunities to gain additional exposure and in-depth training in areas of particular interest, e.g. clinical science, research, teaching and learning, service, etc. The course director is responsible for the overall administration of the course, while individual elective instructors are responsible for teaching their electives and measuring students'

attainment of elective goals and learning objectives. Students are responsible for working with instructors to monitor their progress in meeting the expectations for satisfactory achievement of the learning objectives outlined in each elective.

DENT D820 Clinical Periodontics II (1.0 cr.) Clinical Periodontics II is the second of two clinical courses, the goals of which are to teach basic periodontal concepts and the fundamentals of periodontal surgery and to develop clinical competency. Students will assist graduate students during surgical procedures and, once capable, may perform periodontal surgeries on their own patients

DENT D835 Cariology and Operative Dentistry Clinic III (2.0 cr.) In Cariology and Operative Dentistry Clinic III students continue their clinical education in Cariology and Operative Dentistry by treating patients during supervised clinical experiences. This courses will enable the student, upon graduation, to be competent and proficient in the diagnosis and management of dental caries and other dental conditions requiring non-surgical (preventive) treatment or direct restorative care using dental amalgam and resin composite, which are required experiences for graduation, and are evaluated by the Caries Risk Assessment Competency in the 3rd year, and the Operative Dentistry Clinical Competency exam in the 4th year. Additionally, students may obtain clinical experiences involving glass ionomer, cosmetic resin bonding, sealants, direct and indirect pulp therapy, control of rampant caries, provisional and sedative restorations, repair of castings, and direct gold.

DENT D838 Community-based Clinics Rotation (2.5 cr.) The purpose of the Community Clinics Rotation Course is to provide fourth-year DDS students with an immersive experience in a community-based dental clinic, providing access to oral health care for the underserved populations in the State of Indiana, which may include the medically compromised, patients with special needs, and the uninsured/underinsured. Students will have the opportunity to enhance their clinical skills while providing dental services to a diverse patient population under the supervision of community-based dental faculty, as well as the opportunity to work with dental auxiliary staff and other members of the community-based dental clinic. Through this immersive experience, students will gain first-hand knowledge of the social, cultural, economic, and regulatory issues involved in providing oral health care to underserved populations of our state.

DENT D840 Clinical Prosthodontics (0.5 cr.) The purpose of Clinical Prosthodontics is to continue clinical teaching and learning in the areas of fixed, removable, and dental implant prosthodontics. This is the culmination of the DDS Prosthodontics curriculum, whereby students apply the foundational knowledge, simulated experiences, and initial patient-based competency experiences to the comprehensive care of patients. Students will continue to develop the knowledge, skills and values necessary to diagnose, treatment plan, and treat patients requiring dental prostheses. Students' continued competency will be measured by a mock-licensure exam, a Prosthodontics OSCE, and oversight of clinical prosthodontic experiences (CPE).

DENT D863 Hospital Dentistry Rotation (0.5 cr.) The purpose of the Hospital Dentistry rotation is to expose the student to the management of patients referred for dental treatment within the hospital environment, patients with complex medical conditions and patients with neurodevelopmental disorders (intellectual and developmental disabilities or IDD). This rotation is structured to supplement the knowledge base from the didactic curriculum so that the student will achieve knowledge to manage patients' care. Management of patients' care depends on the specific medical and dental diagnoses and may entail the ability to monitor or coordinate care provided by others, refer the patient to another health care provider, or perform the actual procedure.

DENT D865 Oral Surgery Rotation III (0.5 cr.) Oral Surgery Rotation III is designed for students to expand their clinical experience and refine their knowledge in basic oral and maxillofacial surgery. The rotation is structured to supplement the knowledge base from the didactic curriculum so that students will achieve knowledge and be able to manage their patients' care. Management of patient care will depend on the specific diagnoses and may entail the ability to monitor or coordinate care provided by others, refer the patient to another health care provider, or perform the actual procedure.

DENT D866 Oral Surgery Clinic Rotation IV (0.5 cr.) Oral Surgery Rotation IV is a continuation of the D865 Oral Surgery Rotation III course, and is designed for students to expand their clinical experience and refine their knowledge in basic oral and maxillofacial surgery. The rotation is structured to supplement the knowledge base from the didactic curriculum so that students will achieve knowledge and be able to manage their patients' care. Management of patient care will depend on the specific diagnoses and may entail the ability to monitor or coordinate care provided by others, refer the patient to another health care provider or perform the actual procedure.

DENT D871 Clinical Endodontics III (0.5 cr.) The objective of Clinical Endodontics III is to provide students with experience in endodontic treatment. Upon completion of this course students will be capable of managing endodontic emergencies and completing uncomplicated endodontic cases.

DENT D872 Clinical Endodontics IV (0.5 cr.) Clinical Endodontics IV is the continuation of D871 Clinical Endodontics III and provides students with experience in endodontic treatment. Upon completion of this course students will be capable of managing endodontic emergencies and completing uncomplicated endodontic cases.

DENT D890 Pediatric Dentistry Rotation III (1.0 cr.) The purpose of Pediatric Dentistry Clinical Rotation III is to prepare the student dentist for the care of the oral health of the child patient. This course is a supervised clinical experience in the practice of dentistry for children subsequent to the lecture and technique course. Satisfactorily completing the D790/D791 Pediatric Dentistry Rotations are prerequisites for taking this course. It is comprised of clinical experience in the diagnosis, treatment planning, caries risk assessment and caries risk management with preventive measures and typical treatment procedures for typical children.

Elective Courses (All Program Years)

DENT T830 Community Service (0.5 cr.) This elective Community Service course is part of the IUSD service programs (Community-based Dental Education), which aim at connecting meaningful community service experiences with academic and personal growth, as well as civic responsibility.

DENT T831 Global Service Learning Lecture (0.5 cr.) The elective Global Service Learning course is part of the IUSD service programs (Community-based Dental Education), which aim at connecting meaningful community service experiences with academic and personal growth, as well as civic responsibility. Several of these programs utilize the service learning pedagogy, which includes additional components. For those programs, service learning is integrated into the curriculum and so provides structured time for reflection, enhances teaching and learning, and fosters civic responsibility. The global service learning (GSL) programs will enhance students' linguistic and cultural skills through an immersion experience and by informing students about health care systems in other countries. In the GSL lecture course, students will learn about cultural humility through service learning abroad, world health views, the purpose of IUSD service programs, and cross cultural encounters.

DENT T832 Global Service Learning Trip (2.5 cr.) The elective Global Service Learning Trip course is part of the IUSD service programs (Community-based Dental Education), which aim at connecting meaningful community service experiences with academic and personal growth, as well as civic responsibility. Several of these programs utilize the service learning pedagogy, which includes additional components. For those programs, service learning is integrated into the curriculum and so provides structured time for reflection, enhances teaching and learning, and fosters civic responsibility. The global service learning (GSL) programs will enhance students' linguistic and cultural skills through an immersion experience and by informing students about health care systems in other countries.

Special Clinics and Independent Study

DENT D900 Clinical Procedures (VAR cr.) Required for all students following the fourth year who have not been certified for graduation by the last day for summer registration. Elective for those who have been certified for graduation by the last day for summer registration. Required for those students still not certified for graduation by the first day of the Summer Indiana Dental Board examination. Elective for those students certified for graduation by the first day of the Summer Indiana Dental Board examination.

DENT D901 Clinical Procedures (VAR cr.) Required for students who have not been certified for graduation by the last day of fall registration following the fourth year.

DENT D902 Clinical Procedures (VAR cr.) Required for students who have not been certified for graduation by the last day of spring registration following the fourth year.

DENT D925 Predoctoral Independent Study (VAR cr.) This course provides students with an individualized study plan to support successful re-entry to the Predoctoral Dental Education Program.

Institutional Competencies

The Doctor of Dental Surgery (D.D.S.) degree program is four academic years in length. The required curriculum is presented over eight semesters and four summer sessions. Intramural electives (40 clock hours) are required, and support students' professional growth in areas of personal interest.

The stated goals of the dental education program are focused on educational outcomes and define the competencies needed for graduation, including the preparation of graduates who possess the knowledge, skills, and values to begin the practice of general dentistry.

The curriculum supports the attainment of the following list of institutionally defined competencies expected of a general dentist entering the profession:

1. Graduates must be competent in patient assessment, diagnosis, and referral.
2. Graduates must be competent in treatment planning.
3. Graduates must be competent to communicate and collaborate with individuals and groups to prevent oral disease and promote oral and general health in the community.
4. Graduates must be competent in control of pain and anxiety, clinical pharmacology, and management of related problems, including prescribing practices and substance use disorders.
5. Graduates must be competent in the prevention and management of dental and medical emergencies.
6. Graduates must be competent in detection, diagnosis, risk assessment, prevention, and management of dental caries.
7. Graduates must be competent in the diagnosis and restoration of defective teeth to form, function and esthetics.
8. Graduates must be competent in the replacement of teeth including fixed, removable and dental implant prosthodontic therapies.
9. Graduates must be competent in the diagnosis and management of periodontal disorders.
10. Graduates must be competent in the prevention, diagnosis and management of pulpal and periradicular diseases.
11. Graduates must be competent in the diagnosis and management of oral mucosal and osseous disorders.
12. Graduates must be competent to collect and assess diagnostic information to plan for and perform uncomplicated oral surgical procedures.
13. Graduates must be competent to recognize and diagnose malocclusion and space management needs.
14. Graduates must be competent in discerning and managing ethical issues and problems in dental practice.
15. Graduates must be competent in the understanding and application of the appropriate codes, rules, laws and regulations that govern dental practice.
16. Graduates must be competent in behavioral patient management and interpersonal skills.
17. Graduates must be competent in understanding the fundamental elements of managing a dental practice.

18. Graduates must be competent in performing and supervising infection control procedures to prevent transmission of infectious diseases to patients, the dentist, the staff and dental laboratory technicians.
19. Graduates must be competent in providing evidence-based patient care in which they access, critically evaluate, and communicate scientific and lay literature, incorporating efficacious procedures with consideration of patient needs and preferences.
20. Graduates must have the ability to recognize the role of lifelong learning and self-assessment to maintain competency.

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Allied Dental Programs

Indiana University School of Dentistry offers multiple undergraduate degress to prepare students for a rewarding career in the fast-growing, high-demand allied professions field on both the Indiana University Indianapolis campus and the Indiana University Fort Wayne campus.

Indianapolis Allied Dental Programs**Bachelor of Science in Dental Hygiene (B.S.D.H.)**Prepare for a career as a licensed dental hygienst with an entry level bachelor's degree in dental hygiene.

Bachelor of Science in Public Health Dental Hygiene Develop further expertise with the Bachelor of Science degree-completion program in public health dental hygiene for licensed dental hygienists.

Certificate in Dental Assisting Become a certified dental assistant with the dental assisting certificate.

Fort Wayne Allied Dental Programs**Bachelor of Science in Dental Hygiene (B.S.D.H.)**Prepare for a career as a licensed dental hygienst with an entry level bachelor's degree in dental hygiene.

Bachelor of Science in Dental Technology (B.S.D.T.) Prepare for a diverse career as a dental technician with an entry level bachelor's degree in dental technology.

Certificate in Dental Assisting Become a certified dental assistant with the dental assisting certificate.

Learn more Indiana University School of Dentistry's Indianapolis dental hygiene program, Indiananpolis dental assisting program, and Fort Wayne allied dental eduation programs.

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Updated April 2025

Dental Hygiene Indianapolis

Indiana University School of Dentistry, located on the IU Indianapolis campus, offers an entry-level, undergraduate degree leading to a Bachelor of Science in Dental Hygiene (B.S.D.H.) and an undergraduate degree completion program leading to a Bachelor of Science (B.S.) in Public Health Dental Hygiene.

Learn more about the B.S.D.H. degree program

- Overview
- Admissions
- Tuition and Fees
- Institutional Competencies
- Curriculum
- Course Descriptions

Learn more about the B.S. in Public Health Dental Hygiene degree completion program

- Overview
- Admissions
- Tuition and Fees
- Institutional Competencies
- Course Descriptions

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Updated April 2025

B.S.D.H. Degree Program Overview

The Bachelor of Science in Dental Hygiene (B.S.D.H.) degree program at Indiana University School of Dentistry is a full-time curriculum which is three and one-half years in length and is composed of prerequisite college coursework (30 college credit hours), a core curriculum of professional coursework (69 credit hours) presented over four semesters and summer session, and a specialized track (20 credit hours) in one of two subjects: Public Health Dental Hygiene and Health Administration.

Prerequisite college course work must be completed at an undergraduate college or university prior to acceptance to the Dental Hygiene program. Once accepted into the program, all core, and professional courses are mandatory.

The Dental Hygiene program at Indiana University School of Dentistry is fully accredited by the Commission on Dental Accreditation (CODA).

Learn more about how to apply to Indiana University School of Dentistry's B.S.D.H. program and review the tuition and fees, institutional competencies, curriculum, and course descriptions.

Updated April 2025

B.S.D.H. Degree Program Admissions

Application Process Please refer to B.S.D.H. "How to Apply" section on the Indiana University School of Dentistry (IUSD) website for a comprehensive description of the admissions process and procedures for the Bachelor of Science in Dental Hygiene (B.S.D.H.) program as well as specific instructions for documenting observations, the personal statement, and skill standards.

Students must be admitted to IU Indianapolis before applying for admission to the Bachelor of Science in Dental Hygiene (B.S.D.H.) program at Indiana University School of Dentistry. Students should apply to IU Indianapolis through the IU Indianapolis Office of Admissions.

After being admitted to IU Indianapolis, students are required to apply to the B.S.D.H. program online through the Dental Hygiene Centralized Application Services (DHCAS), an online application service managed by the American Dental Education Association (ADEA).

Grade Point Average (G.P.A.) and Prerequisite Requirements Required prerequisite courses may be taken at any accredited college or university if they are listed as approved courses by the IUSD Dental Hygiene program. Remedial courses may not be used to fulfill this requirement. All applicants must maintain a minimum cumulative college grade point average of 2.7 (on a 4.0 scale) and achieve a minimum course grade of 2.5 (on a 4.0 scale) in all prerequisite courses to be considered for admission to the program. In addition, applicants must earn a 3.0 grade point average in the combined prerequisite science courses (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 must be completed by the end of the spring semester of the year in which the student wishes to enter the program. Required science courses must have been completed within the past five years. Questions about coursework that does not meet these time limits should be directed to the IUSD Director of Dental Hygiene.

Admission Requirements 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.** All eligible candidates will be invited to **interview** with the dental hygiene faculty during the spring semester as part of the application process.

Applications to the B.S.D.H. program are processed online through the American Dental Education Association's Dental Hygiene Centralized Application Service (DHCAS). All application materials must be submitted by **February 1**. Applicants who have previously applied must submit a new application when reapplying.

Requirements and forms for admission to the B.S.D.H. 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.

Class size is limited, and there are more qualified applicants than can be accepted each year. Applicants are encouraged to consult with the dental hygiene 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. 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 coursework, Internet searching, basic word processing, and e-mail applications.

Learn more about Indiana University School of Dentistry's B.S.D.H. program and review the tuition and fees, institutional competencies, curriculum, and course descriptions.

Updated April 2025

B.S.D.H. Degree Program Tuition and Fees

Please refer to the "Costs & Financial Aid" section of the Indiana University School of Dentistry (IUSD) website for a comprehensive description of the tuition, fees, and types of costs associated with all academic programs, including the B.S.D.H. degree program.

Enrollment cannot be considered final until the student has been officially registered and paid the required tuition and fees by the deadlines established by the IU Indianapolis Office of the Bursar. The IU Indianapolis Office of the Bursar also provides information regarding payment methods, billing deadlines and payment procedures. The Office of the Bursar assesses monthly late fees on overdue balances.

Students applying for admission to the IUSD Dental Hygiene program are required to apply online through the American Dental Education Association's Dental Hygiene Centralized Application Services (DHCAS). Students should refer to ADEA DHCAS for more information about the application fee and fee waivers for eligible applicants. Health insurance coverage is an additional fee for students who are not already covered under their own policy. Other potential fees such as parking fees, graduation photos, and state or regional board exam applications are contingent upon the individual plans of each student.

Learn more about how to apply to Indiana University School of Dentistry's B.S.D.H. program and review the institutional competencies, curriculum, and course descriptions.

Updated April 2025

B.S.D.H. Degree Program Curriculum

Indiana University School of Dentistry's Bachelor of Science in Dental Hygiene (B.S.D.H.) degree program is two and one half academic years in length and composed of a core curriculum of 27 courses presented over four semesters and one summer session. In addition, a specialized track of six courses over one semester and one summer session is available.

Please refer to B.S.D.H. "How to Apply" section on the Indiana University School of Dentistry website for a comprehensive description of the required prerequisite

coursework, including general education requirements, for the B.S.D.H. program.

Dental Hygiene Program, Year 1, Fall Semester
DHYG H204 Periodontics
DHYG H205 Medical and Dental Emergencies
DHYG H211 Head and Neck Anatomy
DHYG H214 Oral Anatomy
DHYG H216 Nutrition
DHYG H218 Fundamentals of Dental Hygiene
DHYG H303 Radiology

Dental Hygiene Program, Year 1, Spring Semester
DHYG H206 General Pathology I
DHYG H215 Pharmacology and Therapeutics
DHYG H217 Preventative Dentistry
DHYG H219 Clinical Practice I
DHYG H308 Dental Materials
DHYG H321 Clinical Periodontics
Cultural Understanding Elective*

Dental Hygiene Program, Year 1, First Summer Session
DHYG H221 Clinical Dental Hygiene Procedures
DHYG H250 Local Anesthesia and Pain Control
DHYG H305 Radiology Clinic I

Dental Hygiene Program, Year 2, Fall SemesterDHYG H207 General Pathology II
DHYG H252 Introduction to Evidence-Based Dental Hygiene Care
DHYG H301 Clinical Practice II
DHYG H306 Radiology Clinic I
DHYG H311 Dental Health Education
DAE E351 Advanced Dental Materials for Dental Auxiliaries
Analytical Reasoning Elective*

Dental Hygiene Program, Year 2, Spring Semester
DHYG H302 Clinical Practice III
DHYG H304 Oral Pathology
DHYG H344 Senior Hygiene Seminar
DHYG H347 Community Dental Health
PSY B305 Statistics or STAT I301 Elementary Statistical Methods
Arts & Humanities Elective*
*These courses are offered online at least once a year.

Dental Hygiene Program, Year 2, Second Summer Session

(Choose a track)
Track 1 Public Health Dental HygieneDHYG H411 Clinic
PBHL H120 Health Care Delivery in the U.S.
PBHL P109 Introduction to Public Health
Track 2 Health Care AdministrationDHYG H411 Clinic
PBHL H120 Health Care Delivery in the U.S.
PBHL H375 Management of Health Services Organizations

Dental Hygiene Program, Year 3, Fall Semester

(Choose a track)
Track 1 Public Health Dental HygieneDHYG H404 Practicum in Community
DHYG H420 Clinic
Public Health Elective
Public Health Elective
Open Elective (if applicable)

(Choose Public Health electives)
PBHL E210 Zombie Apocalypse and Doomsday Infection
PBHL H330 Global Public Health
PBHL H420 Health Policy
PBHL S337 Health Equity and Social Determinants of Health
PBHL S422 Coaching for Health Behavior Change
Track 2 Health Care AdministrationDHYG H420 Clinic
Health Care Administration Track Elective
Health Care Administration Track Elective
Health Care Administration Track Elective
Open Elective (if applicable)

(Choose Health Care Administration electives)
PBHL H305 Medical Group Management
PBHL H310 Lean in Healthcare
PBHL H320 Health Systems Administration
PBHL H345 Operation Management & Quality Improvement in Healthcare
PBHL H346 Organizational Behavior and HR Management in Health Care
PBHL H420 Health Policy
PBHL H432 Healthcare Marketing
PBHL H441 Legal Aspects of Health Care Administration
PBHL H455 Topics in Public Health

Learn more about how to apply to Indiana University School of Dentistry's B.S.D.H. program and review the tuition and fees, institutional competencies, and course descriptions.

Updated April 2025

B.S.D.H. Degree Program Course Descriptions

DHYG H204 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 H205 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 H206 General Pathology (1 cr.)
Mechanisms of disease at the cellular, organ, and systematic levels with special reference to specific disease processes; includes general concepts, terminology, and pathology of organ systems.

DHYG H207 General Pathology II/Oral Pathology (1 cr.)
Introduction to oral pathology. Provides concise foundation and basic principles of oral pathology related to specific disorders or lesions in the context of the practice of dental hygiene.

DHYG H211 Head and Neck Anatomy (2 cr.)
A detailed study of the anatomy of the head and neck. Some attention is given to oral embryology and the growth of tooth structure.

DHYG H214 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 H215 Pharmacology and Therapeutics (2 cr.)
Actions and uses of drugs and theory of anesthetics; emphasis on drugs used in dentistry.

DHYG H216 Nutrition (2 cr.)
Specific ideas in chemistry are correlated with working principles in dentistry- previous knowledge of chemistry assumed.

DHYG H217 Preventative Dentistry (1 cr.)
Detection and prevention of dental disease; included is a study of dental surveys, dental indices, and fluoride therapy.

DHYG H218 Fundamentals of Dental Hygiene (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 H219 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 H221 Clinical Dental Hygiene Procedures (1-3 cr.)
Clinical assignment for instruction and experience in performing dental hygiene services.

DHYG H250 Local Anesthesia and Pain Control (2 cr.)
This course addresses coverage of pain and anxiety management for conscious dental clients. The indications, contraindications, and pharmacology of topical anesthesia, local anesthesia, and nitrous oxide and oxygen sedation used in dentistry will be discussed. Local anesthesia techniques and the administration of nitrous oxide and oxygen sedation will be studied.

DHYG H252 Introduction to Evidence-Based Dental Hygiene Care (1 cr.)
This course will provide foundational knowledge for the dental hygiene student 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 H301 Clinical Practice II (4 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 H302 Clinical Practice III (4 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 H303 Radiology (3 cr.)
Principles of radiation production, placement of intraoral film, proper exposure and processing of film, radiation safety, and interpretation of radiographs.

DHYG H304 Oral Pathology: Case Based (1 cr.)
Developmental abnormalities and acquired disorders of teeth and surrounding structure using clinical cases to develop differential diagnosis.

DHYG H306 Radiology Clinic II (1 cr.)
Clinical application of intraoral and extraoral radiographs.

DHYG H308 Dental Materials (2 cr.)
Composition, physical, and chemical properties of materials used in dentistry.

DHYG H311 Dental Health Education (2 cr.)
An introduction to basic communication and motivation skills, instructional objectives, learning theory, evaluation of educational materials, and special needs patients.

DHYG H321 Clinical Periodontics (1-2 cr.)
A study of periodontal disease, including the anatomy, classification, etiology, treatment, and relationship to systemic conditions.

DHYG H344 Dental 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 H347 Community Dental Health (4 cr.)
Principles and practice of program planning, implementation, and evaluation for community and school dental health programs.

DHYG H411 Clinical Practice IV (1 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 H420 Clinical Practice V (1 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.

DAE E351 Advanced Dental Materials for Dental Auxiliaries (1 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.

PBHL H120 Health Care Delivery in the U.S. (3 cr.)
An overview of the health care delivery system in the US from the lens of health care managers, this course will introduce the history of US health care, management in the health care delivery context, the role of government and policy in health care delivery, and the interconnectedness of health care delivery and public health. Health care administration career pathways will also be explored.

PBHL H375 Management of Health Service Organizations (3 cr.) This course explores the discipline of management and its major components relating to health service organizations. This course will provide students with a foundation of basic fundamentals, principles and techniques of management which have particular relevance and application in healthcare. Students will learn about management theory and its practical application in healthcare in fundamental

areas such as planning, organizing, leading, and controlling. Other key elements of management such as communication, decision making, delegation, participatory management, leadership style, managing staff, teamwork, and change and innovation will be explored. Successful completion of this course will help provide students with a general foundation of knowledge about management and its application in health service organizations. Instructional methods used will include lectures, interactive discussions, readings, in-class exercises and individual and group homework assignments using a wide range of management terms, concepts, fundamentals, theories, methods, techniques, and practices used in managing health service organizations. Special emphasis will be given to the role and application of leadership in the management of a diverse healthcare workforce, in a variety of health service settings. This course is designed to help create a foundation of knowledge and understanding of management that students will use in other courses in the public health undergraduate programs.

PBHL P109 Introduction to Public Health (3 cr.)
Introduction to public health using Indianapolis as case study. Well-being, illness, injury, education, violence, housing, work, cultural and neighborhood variability will be examined to demonstrate the public health perspective on any situation and to see how the state of health in our city connects to the nation and the world.

Updated April 2025

B.S. Degree Completion Program Overview

Indiana University School of Dentistry's Bachelor of Science (B.S.) in Public Health Dental Hygiene degree completion program 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. The degree completion program is designed to meet the needs of part-time students who wish to work while completing their bachelor's degree.

The degree completion program prepares licensed dental hygienists for leadership roles in education, public health, commercial ventures, professional associations, and health advocacy. Completing the B.S. in Public Health Dental Hygiene degree completion program 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 dental hygienists for entry into graduate programs.

Learn more about how to apply to Indiana University School of Dentistry's Bachelor of Science (B.S.) in Public Health Dental Hygiene degree completion program and review the tuition and fees, institutional competencies, and course descriptions.

Updated April 2025

B.S. Degree Completion Program Admissions

Indiana University School of Dentistry's admission requirements for the Bachelor of Science (B.S.) in Public Health Dental Hygiene degree completion program include:

- Completion of at least 90 credit hours that were earned at an IU campus or that are transferable to IU Indianapolis from another college or university
- Graduation from an accredited dental hygiene program
- Satisfactory completion of the National Board Dental Hygiene Examination
- Current licensure as a dental hygienist

Accepted students are expected to have basic computer literacy skills sufficient to participate in web-based instruction, computer word processing, and email communication.

Application Process
Applications may be requested by contacting the program director at the email address dnthyg@iu.edu. Applications may be received at any time during the academic year, but all application materials should be submitted no later than six weeks prior to the semester in which the student wishes to be admitted. 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.

Degree Requirements Students enrolled in the B.S. in Public Health Dental Hygiene degree completion program must complete 120 credit hours to complete the degree, including a core curriculum consisting of five required courses (20 credit hours):

- Statistics at the 300 course level (3 credit hours)
- DHYG H402 Practicum in Dental Hygiene Education
OR
- DNYG H404 Practicum in Community Health (4 credit hours)
- DHYG H403 Advanced Community Dental Hygiene (4 credit hours)
- DHYG H405 Introduction to Health Care Research (3 credit hours)
- DHYG H406 Educational Methodology in Health Science Education (3 credit hours)
- DHYG H407 Utilization of Instructional Techniques in Health Science Education (3 credit hours)

Students who have completed any upper-level college courses prior to finishing an associate degree in dental hygiene may be able to count those toward electives, as determined by the program director. Students who enter the program with fewer than 90 credit hours of coursework may need to take additional electives to reach the minimum number of credit hours required to earn the degree. Students must meet the state general education core requirements to complete their bachelor's degree.

Learn more Indiana University School of Dentistry's Bachelor of Science (B.S.) in Public Health Dental

Hygiene degree completion program and review the tuition and fees, institutional competencies, and course descriptions.

Updated April 2025

B.S. Degree Completion Program Tuition and Fees

Please refer to the "Costs & Financial Aid" section of the Indiana University School of Dentistry (IUSD) website for a comprehensive description of the tuition, fees, and types of costs associated with all academic programs, including the Bachelor of Science (B.S.) in Public Health Dental Hygiene degree completion program.

Enrollment cannot be considered final until the student has been officially registered and paid the required tuition and fees by the deadlines established by the IU Indianapolis Office of the Bursar. The IU Indianapolis Office of the Bursar also provides information regarding payment methods, billing deadlines and payment procedures. The Office of the Bursar assesses monthly late fees on overdue balances.

Learn how to apply to Indiana University School of Dentistry's B.S. in Public Health Dental Hygiene degree completion program and review the institutional competencies and course descriptions.

Updated April 2025

B.S. Degree Completion Program Course Descriptions

DHYG H402 Practicum in Dental Hygiene Education (4 cr.)
Structured practical experience in planning, supervising, coordinating and evaluating instruction in an educational setting. Emphasis on faculty roles and responsibilities.

DHYG H403 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 H405 Introduction to Health Care Research (3 cr.)
Review of current literature related to periodontics, oral pathology, preventive dentistry, and the current practices of dental hygiene.

DHYG H406 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 online component.

DHYG H407 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 online component.

PSY B305 Statistics (3 cr.)
Introduction to basic statistical concepts; descriptive statistics and inferential statistics. Introduction to data analytic software.

STAT I301 Elementary Statistical Methods (3 cr.)
Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, and correlation and regression. Software is used throughout.

Updated April 2025

B.S.D.H. Degree Program Institutional Competencies

The Indiana University School of Dentistry Bachelor of Science in Dental Hygiene (B.S.D.H.) curriculum supports attainment of the following list of institutionally defined 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.

Learn more about how to apply to Indiana University School of Dentistry's B.S.D.H. program and review the tuition and fees, curriculum, and course descriptions.

Updated April 2025

B.S. Degree Completion Program Institutional Competencies

The objectives of Indiana University School of Dentistry's Bachelor of Science (B.S.) in Public Health Dental Hygiene degree completion program 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.

Learn how to apply to Indiana University School of Dentistry's B.S. in Public Health Dental Hygiene degree completion program and review the tuition and fees and course descriptions.

Updated April 2025

Dental Assisting

Indiana University School of Dentistry, located on the IU Indianapolis campus, offers an undergraduate certificate in dental assisting. The dental assisting program is accredited by the Commission on Dental Accreditation (CODA).

Learn more about the Certificate in Dental Assisting program

- Overview
- Admissions
- Tuition and Fees
- Student Learning Outcomes
- Course Descriptions

While every attempt is made to provide accurate and current information in this bulletin, Indiana University reserves the right to change without notice statements in the bulletin concerning guidelines, policies, procedures, fees, curricula, courses, or other matters.

Updated April 2025

Overview

Indiana University School of Dentistry offers a traditional on-campus certificate in dental assisting program. The program is a full-time, two-semester program that requires the completion of 33 credit hours. The curriculum consists of 15 required classes that include approximately 1,000 hours of lectures, labs, and clinical experiences. All instruction takes place at the School of Dentistry, located on the IU Indianapolis campus in downtown Indianapolis. Students are required to complete at least 300 clinical hours to earn the certificate.

Dental assisting students are required to take the three Dental Assisting National Board (DANB) and Certified Dental Assistant (CDA) exams.

Graduate of the dental assisting program can continue their education at IU Indianapolis by pursuing one of six bachelor's degrees that accept the dental assisting course credits. Contact the Director of Dental Assisting by emailing dast@iu.edu for more information.

Learn more about how to apply to Indiana University School of Dentistry's Certificate in Dental Assisting program and review the tuition and fees, student learning outcomes, and course descriptions.

Updated April 2025

Student Learning Outcomes

Graduates of the Indiana University School of Dentistry Certificate in Dental Assisting program will be prepared to:

1. Apply knowledge of the basic sciences, social sciences, clinical practice, and dental technology to deliver comprehensive dental care.
2. Practice and apply safe and aseptic delivery of patient care.
3. Communicate effectively with patients and health care professionals in coordinating and providing patient care including the use of technology and practice management techniques.
4. Utilize critical thinking, decision making, and problem solving skills in the provision of evidence-based practice, under the direction and supervision of the dentist.
5. Apply the Dental Assisting National Board’s (DANB) Code of Professional Conduct in all endeavors and conduct themselves with the highest levels of professionalism, ethics and personal integrity.
6. Adhere to state and federal laws, recommendations, and regulations in the provision of oral health care.
7. Provide care to all patients using an individualized approach that is culturally sensitive, compassionate, and patient-centered.
8. Internalize the value of lifelong learning and understand the importance of remaining current

as the dental health care delivery system and technology change.
9. Participate in preventive dental care and support oral health through the promotion of overall health and wellness.
10. Achieve success on DANB's Certified Dental Assistant (CDA) exams.
11. Assume a leadership and collaborative role in the advancement of the dental assisting profession through community activities and professional organizations.

Learn more about how to apply to Indiana University School of Dentistry's Certificate in Dental Assisting program and review the tuition and fees and course descriptions.

Updated April 2025

Admissions

Applicants must meet all minimum criteria to be considered for admission to the Indiana University School of Dentistry (IUSD) Certificate in Dental Assisting (DA) program. Enrollment is limited to 20 students. All students meeting minimum requirements are encouraged to apply. However, meeting the minimum criteria does not guarantee admission and not all applicants will be accepted. Final selection will be based on a ranking of the applicant pool. If English is not the applicant's primary language, English proficiency must be demonstrated. The English for Academic Purposes Exam (EAP) or the Test of English as a Foreign Language (TOEFL) may be required.

Grade Point Average (GPA)
Four grade point averages will be evaluated as part of the application process: high school cumulative GPA, college cumulative GPA (if applicable), high school life science GPA, and college life science GPA (if applicable). A minimum GPA of 2.0 on a 4.0 scale is required in each of these areas. Applicants are ranked based on the four GPAs and personal statement score, with one bonus point for bi/multilingual applicants, and one bonus point for applicants who have completed dental assisting coursework in high school, or who have at least 200 hours of dental assisting work experience.

The high school cumulative GPA score will be doubled for applicants with less than 12 college credit hours. The high school life science GPA score will be doubled for applicants with less than six college credit hours in life science courses.

Applicants with a cumulative high school GPA below 2.0 will be considered for admission, with a cumulative college GPA of 2.0 or above, with a minimum of 15 college credit hours. Applicants with a high school life science GPA below 2.0 will be considered for admission, with a college life science GPA of 2.0 or above, with a minimum of six college credit hours.

Applicants with 26 or more college credits are not required to submit high school transcripts. The college cumulative and life science GPA scores will be doubled for applicants with 26 or more college credit hours.

Completion of at least two life science courses in high school and/or college is required. Commonly accepted courses for life science GPAs are biology, chemistry, physics, anatomy and physiology, microbiology, and psychology as a biological science. Non–life science courses such as earth space science or astronomy are not accepted.

Admissions Process

1. IU Indianapolis Application
All dental assisting applicants must first be admitted to IU Indianapolis through the IU Indianapolis Office of Admissions. There is an undergraduate application fee to apply to IU Indianapolis.

2. Dental Assisting Observation
Applicants are strongly encouraged to observe a dental assistant in a least two (2) different dental offices for at least four (4) hours total. The requirements for the verification of observation document* are:

- Must be on official letterhead for office(s)/or be sent via office email
- Signed by a dentist or office manager
- Include the applicant name, date & time of observation(s), and dental assistant's name that you observed
- Uploaded with Dental Assisting program application

*Contact the Director of Dental Assisting by emailing dast@iu.edu to request alternatives to observation, if needed.

3. Personal Statement and Recorded Interview
In 500-800 words, write a personal statement to submit with the program application. The personal statement should include the following content:

- Describe your goals and explain why you are pursuing dental assisting education.
- Answer only one (1) of the two (2) questions below:
  - Describe any leadership roles, service activities, extracurricular activities, accomplishments, and/or achievements that have influenced your personal growth.
  - Describe obstacles or challenges you have faced that impacted your life or educational goals.

4. Dental Assisting Application and Transcripts
The Dental Assisting program application, verification of observation document, and all official transcripts must be received by the IUSD Dental Assisting program director by June 15. However, applications and documents received after this date will be considered until the class is full. Please note applicants applying by June 15 will receive priority consideration for admissions.

To apply to the Certificate in Dental Assisting program, please refer to Dental Assisting "How to Apply" section on the Indiana University School of Dentistry website for the link to the application.

If final high school and college transcripts are on file with IU Indianapolis, the Dental Assisting program does not require additional copies. Applicants must submit an **OFFICIAL** high school transcript (Grades 9-12) of all academic work completed. If applicable, applicants may submit a copy of GED/TASC Certificate and scores. Applicants who are currently enrolled or have attended a

college or university must submit an official transcript from each school attended.

Electronic official transcripts may be emailed to dast@iu.edu. Only official transcripts emailed by the institution will be accepted. Unofficial copies emailed by the applicant will not be accepted.

If electronic official transcripts are not available, the official transcripts should be mailed to: Indiana University School of Dentistry, Dental Assisting Program, 1121 West Michigan Street, Room DS 317, Indianapolis, IN 46202.

Advanced Standing Policy for Admitted Students Admitted students who have completed a dental assisting program within the last twelve (12) months, passed one (1) or more Dental Assisting National Board (DANB) National Entry Level Dental Assistant (NELDA) exams, and met required competencies may qualify for advanced standing. Upon admission, eligible students may be exempt from certain DA certificate program courses. *(Dental Assisting (DA) Admissions Committee Approved: April 24, 2024)*

To qualify for advanced standing a student must:

1. Be admitted to the IUSD DA Program in Indianapolis.
2. Complete a dental assisting vocational program within the previous twelve (12) months before the application deadline.
    1. Submit an official transcript confirming completion of the dental assisting program.
    2. Submit official course/program documents verifying equivalent didactic, laboratory and pre-clinical content (i.e., syllabi, schedules, competencies, etc.)
3. Pass one (1) or more DANB NELDA exam: Anatomy, Morphology and Physiology (AMP), Radiation Health and Safety (RHS), and/or Infection Control Exam (ICE).
    1. Provide official documentation of passing DANB exams.
4. Successfully complete the in-person IUSD DA Program competencies required for course exemption.

Advanced Standing Awards:

1. Exemption from DAST-A 211 Oral Pathology, Physiology, Anatomy I (1 credit hour) and DAST-A 214 Oral Anatomy, Histology and Embryology (3 credit hours) requires passing the DANB AMP exam.
2. Exemption from DAST-A 303 Radiology Clinic I (2 credit hours) requires passing the DANB RHS exam and completing in-person at IUSD a full mouth series of radiographs competency.
3. Exemption from DAST-A 221 Microbiology and Asepsis Technique (2 credit hours) requires passing the DANB ICE exam and completing competencies in-person at IUSD for handwashing, personal protective equipment, unit cleaning and disinfection, barriers, and instrument processing and sterilization.

Learn more about Indiana University School of Dentistry's Certificate in Dental Assisting program and review the tuition and fees, student learning outcomes, and course descriptions.

Updated April 2025

Admission (Distance Learning Program)

ATTENTION: WE ARE NOT OFFERING DISTANCE LEARNING AS AN OPTION AT THIS TIME. PLEASE SEE OUR ON CAMPUS PROGRAM FOR MORE INFORMATION.

Applicants should follow admission requirements 1 through 4 for the campus program listed below, as well as requirements 5 through 7 also listed below:

1. **IUPUI Application Process: (STEP 1)**
    - All dental assisting applicants must first be admitted to IUPUI through the IUPUI Office of Admissions.
    - Go to www.enroll.iupui.edu to complete the IUPUI undergraduate application and pay the application fee. The Office of Admission must have official transcripts from high schools and colleges you have attended.
    - No final dental assisting application decisions will be made before a decision from IUPUI.
    - The IUPUI deadline for fall applications is May 1.

    Application Location
    IUPUI Office of Undergraduate Admissions
    420 University Blvd. CE 255 (Located in the Campus Center)
    Indianapolis, IN 46202
    apply@iupui.edu

    (317) 274-4591

    Mailing Address for official transcripts to IUPUI:
    IUPUI Office of Undergraduate Admissions
    425 University Blvd. CA 147
    Indianapolis, IN 46202

2. **Dental Assisting Application Process: (STEP 2)**
    - The Dental Assisting Program will accept applications for the 2020-2021 year beginning January 2 through June 15, but students that are already accepted to IUPUI have until August 1st to apply. Please see the link for Application on the left side of this page. Under Application, you will find a link to submit your application to the dental assisting program.
    - **You must apply to IUPUI first and use your student ID number on the dental assisting application.**
    - Everyone must submit an OFFICIAL high school transcript (9-12 grades) of the academic work you have completed. If applicable, submit a copy of TASC scores or a GED Certificate and Scores.
    - If you are currently enrolled in your senior year of high school, initial transcript should include fall semester of your senior year. Final official transcripts for all academic work completed must be received in the IUSD Dental Assisting Office, I.U. School of Dentistry, 1121 W. Michigan Street, Rm. S409, Indianapolis, IN 46202 by the deadline before admission decisions can be made.

- If you are currently enrolled in college courses or have attended a college, university, or vocational program, you must submit an OFFICIAL transcript from both high school and college. Final official transcripts of all academic work completed must be received in the IUSD Dental Assisting Office by the deadline before admission decisions can be made.
- Dental Office Observation Documentation: All applicants must observe a dental assistant in a dental office for a minimum of 8 hours. Your hours of observation must be verified by the office. Please ask the office to type a note verifying your observation hours on their office letterhead. This document must include your name, date, time of observation and the dental assistant's name that you observed. This document must be signed by either the doctor or the office manager. This document must be uploaded with your application.

Send all official documents to:

Dental Assisting Program
IU School of Dentistry
1121 W. Michigan St., DS S409
Indianapolis, IN 46202

Phone: (317) 274-7801
FAX: (317) 274-1363

3. The Admissions Committee reviews all qualified applications. English, Science and the Cumulative GPAs are evaluated for each applicant. The applicant must have earned at least a 2.0 on a 4.0 scale in each of these areas. Both high school and college GPAs are considered. GPAs are considered and the applicants are ranked. The Admissions Committee members meet to review applicant information and vote for the new class members.

The following courses are commonly accepted in the category for English: English Composition, Literature, Etymology, Speech, Medical Terminology, Latin, and Journalism course work. We do not accept Year Book credits.

Common courses accepted in the Science category: Biology, Chemistry for non-majors, Chemistry with a lab, Physics, Anatomy and Physiology, Microbiology, Psychology as a Biological Science. We do not accept non-Life Science Courses.

Applicants must have at least in the category of English and in the category of Science for that category to be considered complete for evaluation.

4. Individuals for whom English is a secondary language must demonstrate proficiency in English before being admitted to the dental assisting program. The dental assisting admissions committee requires an interview and/or writing exercise to determine the applicant's English skills. English for Academic Purposes Exam (EAP) or Test of English as a Foreign Language (TOEFL) may be required and test results will be used as part of the dental assisting admissions evaluation. Students must be able to understand spoken English very well and be able to respond to questions from patients on the clinic floor.

5. 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 or higher software
- Either Internet access at Explorer IE8 or higher DSL or cable modem access

7. Applicants must be able to travel to the Indiana University School of Dentistry when necessary.

Applications will be accepted by the IUSD Dental Assisting Office from January 1 to June 15 prior to the fall semester the applicant wishes to enter the program. However, applications and documents received after this date will be considered until the class is full.

Applicants should send the note of verification from the dental office where you completed our observation hours and all official transcripts to the Dental Assisting Office, Indiana University School of Dentistry, 1121 W. Michigan Street, DS S409, 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 page for updates or changes in dental assisting admissions policies that may occur after publication of this document.

While every attempt is made to provide accurate and current information in this bulletin, Indiana University reserves the right to change without notice statements in the bulletin series concerning rules, policies, fees, curricula, courses, or other matters.

Tuition and Fees

Please refer to the "Costs & Financial Aid" section of the Indiana University School of Dentistry (IUSD) website for a comprehensive description of the tuition, fees, and types of costs associated with all academic programs, including the Certificate in Dental Assisting program.

Enrollment cannot be considered final until the student has been officially registered and paid the required tuition and fees by the deadlines established by the IU Indianapolis Office of the Bursar. The IU Indianapolis Office of the Bursar also provides information regarding payment methods, billing deadlines and payment procedures. The Office of the Bursar assesses monthly late fees on overdue balances.

Health insurance coverage is an additional fee for students who are not already covered under their own policy. Other potential fees such as parking fees, graduation photos, and state or regional board exam applications are contingent upon the individual plans of each student.

Learn more about how to apply to Indiana University School of Dentistry's Certificate in Dental Assisting program and review the student learning outcomes and course descriptions.

Updated April 2025

Course Descriptions

DAST A162 Written and Oral Communication (2 cr.)

Instruction and practice in gathering and organizing material for written and oral presentations in dental contexts to include individual and group projects in communication relevant to the field of dental assisting.

DAST A211 Oral Pathology, Physiology, Anatomy I (1 cr.)
An overview of the structures, functions, and selected diseases of the human body, including basic cells, tissues, organs, and organ systems.

DAST A212 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 A213 Oral Pathology, Physiology, Anatomy II (1 cr.)
This course is an introduction to diseases of the face and oral cavity and its related structures.

DAST A214 Oral Anatomy, Histology and Embryology (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 A221 Microbiology and Asepsis Technique (2 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 A231 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 A232 Dental Materials II (2 cr.)
Lecture and laboratory courses designed to require the student to utilize critical thinking and problem-solving skills while incorporating mechanical, physical, and chemical properties of dental materials in the clinical and laboratory setting. The role of the assistant in selection, manipulation, and biological considerations of dental materials is stressed. Prerequisite required: DAST-A231

DAST A241 Preventive Dentistry and Nutrition (2 cr.)
Etiology and prevention of oral diseases. The role of the dental assistant in different procedures comprising an office preventive program. The effects of major nutrients on the physiologic body processes; applied nutrition in dental caries and periodontal disease. Clinical and laboratory experiences.

DAST A252 Radiology Clinic II (1 cr.)
Clinical experience in the placing, exposing, processing, evaluating, and mounting of intraoral and extra-oral dental radiographs. Practical application of radiation safety measures and patient management techniques are required in the clinical setting. Prerequisite required: DAST-A303

DAST A271 Clinical Science I (4 cr.)
A core course in dental nomenclature; historical developments in dentistry; the role of the assistant as a member of the 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 A272 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. Prerequisite required: DAST-A271

DAST A282 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 as well as interviewing techniques and resumes.

DAST A303 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 A390 Expanded Restorative Functions (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.

Elective Course

DAST A300 Special Topics in Dental Education (1-3 cr.)
Prerequisite required: 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.

Updated April 2025

IU Fort Wayne Allied Dental Education Programs

Indiana University School of Dentistry offers undergraduate degree programs in the allied professions field on the Indiana University Fort Wayne campus.

To learn more about about the IU Fort Wayne Allied Dental Education programs, review the IU Fort Wayne academic bulletin.

IU Fort Wayne Allied Dental Education ProgramsBachelor of Science in Dental Hygiene (B.S.D.H.) Prepare for a career as a licensed dental hygienst with an entry level bachelor's degree in dental hygiene.

Bachelor of Science in Dental Technology (B.S.D.T.) Prepare for a diverse career as a dental technician with an entry level bachelor's degree in dental technology.

Certificate in Dental Assisting Become a certified dental assistant with the dental assisting certificate.

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Graduate Programs

Indiana University School of Dentistry offers advanced dental education graduate programs including the Master of Science in Dentistry (M.S.D), Master of Science (M.S.) in Dental Materials, and Doctor of Philosophy (Ph.D.) in Dental and Oral Health Science degrees; a Graduate Certificate in Dental Informatics program; and an Oral and Maxillofacial Surgery Residency certificate program. All graduate degree and certificate programs begin during the first week of July, except for the M.S. and Ph.D. programs, which begin in August with the fall semester.

The M.S.D. program is intended primarily for students who have received a doctorate in dentistry and who wish to broaden their dental background in one of the various disciplines of dentistry or the basic sciences or complete the academic requirements for specialty boards. Under special circumstances, the M.S.D. degree may be conferred upon outstanding individuals not holding a D.D.S. (or equivalent) degree who have demonstrated ability in dental research and education and who provide evidence of continuing in these fields.

In general, students who wish to practice or teach a clinical subject are encouraged to work toward the M.S.D. degree, while those more interested in the basic science courses are advised to complete the requirements for the M.S. degree. The Ph.D. program is designed specifically for individuals who want to pursue a career in dental research and/or education. Students may register with the IU Indianapolis Graduate School and work toward the M.S. degree or Ph.D. degree.

Please refer to the Fields of Study section for the specific course requirements for each master's degree program as well as the Ph.D. degree and graduate certificate programs.

Learn more about the Master of Science in Dentistry (M.S.D) and Master of Science (M.S.) in Dental Materials, and Ph.D. in Dental and Oral Health Science degrees at Indiana University School of Dentistry.

While every attempt is made to provide accurate and current information in this bulletin, Indiana University reserves the right to change without notice statements in the bulletin concerning guidelines, policies, procedures, fees, curricula, courses, or other matters.

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Fields of Study

In addition to the general requirements for the Indiana University School of Dentistry (IUSD) graduate degree programs, department program directors may specify additional didactic or clinical requirements in order for students to qualify for a major or minor in that field.

Specific course requirements for the M.S., M.S.D., and Ph.D. degree programs and Graduate Certificate in Dental Informatics program may be requested from the IUSD Office of Graduate Education. Specific course requirements for the Oral and Maxillofacial Surgery Residency Certificate program may be requested from the IUSD Department of Oral and Maxillofacial Surgery and Hospital Dentistry. Please refer to the Contact Information section for more details.

Dental Informatics The Graduate Certificate in Dental Informatics program prepares students to examine the role of health information technology in dentistry to improve patient care processes and outcome. Dental Informatics is a rapidly emerging field that has created an urgent need to educate dental clinicians and allied personnel about the use of health information technology in dentistry. Graduates of this program will become adept in informatics and able to effectively use established information systems within their clinical practices. In addition, they will also gain an understanding of the ‘whys’ and ‘hows’ of implementing health information technology in dentistry. The one-year certificate program is offered by Indiana University School of Dentistry and the Indiana University Luddy School of Informatics, Computing, and Engineering on the IU Indianapolis campus.

Core Competencies

The graduate of the one-year certificate program will be able to:

1. Understand the role of health information technology in dentistry.
2. Use health information technology to provide effective and safe patient care.
3. Improve patient care and oral health outcomes through using health information technology.
4. Understand how health information technology can support activities and processes of clinical dental care.
5. Evaluate and select appropriate health information technology applications.
6. Plan, administer and manage health information technology implementations.
7. Understand the use of electronic health record (EHR) data for research and research applications in dental practice.
8. Use applications of informatics methods in research and practice.
9. Establish a critical understanding of using information to improve clinical decisions.
10. Conceptualize a research question or a problem statement and plan and conduct a study to answer the research question or problem.

Dental Materials Available as a M.S. or M.S.D. degree program or as a track offered in the Ph.D. degree program. Minor concentration: operative dentistry or prosthodontics (for M.S.D. degree); chemistry, material science engineering, or mechanical engineering (for M.S. degree).

Core Competencies

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.
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.
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.
3. Provide suggestions on dental biomaterial selection based on current dental literature.

Dental and Oral Health Science The Doctor of Philosophy (Ph.D.) in Dental and Oral Health Science degree program offers tracks in preventive dentistry, oral biology, dental materials and dental biomaterials. For specific details about the program, refer to the Ph.D. Program section.

Core Competencies

Graduates 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.
7. Plan and undertake independent research.

EndodonticsAvailable as a M.S.D. degree program. Minor concentration: oral pathology.

Core Competencies

Students who successfully complete the two-year postdoctoral endodontics program will be able to achieve proficiency in the following areas of clinical science:

1. Diagnosis, treatment planning, and prognosis.
2. Evidenced-based nonsurgical and surgical treatment and retreatment.
3. Outcome evaluation.
4. Radiography and other diagnostic imaging technologies.
5. Management of endodontic treatment of medically compromised patients.
6. Emergency treatment for endodontic conditions.
7. Management of patients with orofacial pain and anxiety.
8. Preparation of space for intraradicular restorations and cores in endodontically treated teeth.
9. Use of enhanced magnification technologies.
10. Communications with patients and health care professionals.

Students will also be prepared to achieve competency in a variety of endodontic techniques, including, for example: vital pulp management, endodontic management of traumatic dental injuries, and endodontic management of developing permanent teeth. The postdoctoral endodontic program will also prepare the graduate to conduct all phases of a research project, including protocol development, review of literature, management of all stages of the study, and preparation of a manuscript for publication.

Maxillofacial Prosthetics Available as a M.S.D degree program. Maxillofacial Prosthetics is a track of the prosthodontics program and is hospital-based.

Core Competencies

Students who successfully complete the four-year postdoctoral program in maxillofacial prosthetics will demonstrate competency in the following areas:

*Clinical Skills and Knowledge*The successful graduate will be able to:

1. Diagnose, treatment plan, and rehabilitate patients with defects of the maxilla, mandible, and facial structures using biocompatible substitutes.
2. Be competent in a wide variety of treatment modalities used in the pre-prosthetic, prosthetic, and post-prosthetic management and treatment of patients with defects of the maxilla, mandible, and facial structures.
3. Be competent in all aspects of the utilization of dental implants to restore intraoral and extraoral defects.
4. Be competent in the prosthetic management of both radiation therapy and chemotherapy patients.
5. Be competent in the laboratory procedures associated with the treatment of patients with defects of the maxilla, mandible, and facial structures.
6. Describe the relationship between material characteristics and clinical performance of dental biomaterials.

*Critical Thinking*The successful graduate will be able to:

1. Draw upon evidence-based research to select and justify appropriate treatment methods and biomaterials.
2. Formulate hypotheses and design the necessary experiments for a given procedure or material evaluation scenario.

*Effective Communication*The successful graduate will be able to:

1. Present appropriate treatment plans to patients and referring dentists correctly in oral and written reports.
2. Provide evidence-based agreements on research findings in oral and written reports.
3. Provide patient education and oral hygiene instructions to patients based upon clinical findings and upon current maxillofacial prosthetic literature.

Cariology and Operative Dentistry Available as a M.S.D. degree program. Minor concentration: dental materials.

Core Competencies

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.
7. Develop a research protocol and perform controlled dental research.
8. Describe the dental caries process in detail.
9. Describe and contrast the interaction of the etiological factors associated with dental caries.
10. Distinguish and assess the different presentations of dental caries.
11. Recognize the epidemiology of dental caries.
12. Discriminate populations at high risk for dental caries.
13. Analyze the external and internal risk determinants of dental caries.
14. Compare and contrast the different methodologies utilized for caries detection.
15. Demonstrate diagnosis of dental caries.
16. Assess caries risk status.
17. Assess salivary flow measurements, buffering capacity, and management approaches for patients with low salivary flow.
18. Compare and contrast some of the different strategies utilized for caries management.
19. Discriminate the therapeutics used in caries management.
20. Compare and contrast the use of sealants based on risk assessment, for individuals and populations.
21. Support the values of prevention, evaluation, and reevaluation.
22. Develop an oral health plan to be incorporated by a health professional team.
23. Develop a community health plan.
24. Summarize the basic principles on developing patient education plans.
25. Critically review scientific methodology.
26. Recognize the different methodologies and techniques related to caries research.

Oral and Maxillofacial Surgery Four-year hospital-based postgraduate residency leading to a certificate in the specialty. Application forms, admission requirements, and details regarding specific course requirements for this program may be requested from the Department of Oral and Maxillofacial Surgery and Hospital Dentistry. Please refer to the Contact Information section for more details.

Core Competencies

Residents who complete the four-year oral and maxillofacial residency will be prepared to:

1. Demonstrate proficiency in the core procedures, treatments, and surgical techniques available to oral and maxillofacial surgeons.
2. Demonstrate familiarity with the full range of procedures, treatments, and surgical techniques available to oral and maxillofacial surgeons.
3. Demonstrate competency in the medical management of the surgical patient, including the ability to adequately perform a preoperative assessment.
4. Demonstrate proficiency in the full range of anesthetic techniques available to oral and maxillofacial surgeons.
5. Manage medical emergencies.
6. Demonstrate familiarity with and an understanding of relevant literature as well as an ability to apply critical thinking to their reading.
7. Participate in scholarly activity, including the ability to develop a research project, write a manuscript, and give scientific and/or case study presentations.

OrthodonticsAvailable as a M.S.D. degree program. Minor concentration: life sciences.

Core Competencies

Students who successfully complete the two-year postdoctoral orthodontics program will demonstrate competency in the following areas:

*Clinical Skills and Knowledge*The graduate will be able to:

1. Correctly identify dental and skeletal problems and discrepancies that contribute to malocclusion.
2. Correctly classify malocclusion.
3. Be competent in selecting, placing, and activating appropriate appliances to treat malocclusion.
4. Describe the relationship between material characteristics and clinical performance of orthodontic biomaterials.
5. Explain the force load that appliances place on the dentition.

6. Use patient management software and imaging software correctly.
7. Identify the need and timing of interdisciplinary care.
8. Identify the effects of growth and development on malocclusion.

*Critical Thinking*The graduate will be able to:

1. Draw upon evidence-based research to select and justify appropriate treatment methods and biomaterials; and
2. Formulate a hypothesis and design methods to solve a problem.

*Effective Communication*The graduate will be able to:

1. Effectively present appropriate treatment plans in written and oral formats to patients and referring dentists.
2. Explain research results correctly in oral and written formats.
3. Provide appropriate patient education concerning the need for appliances, the care of appliances, and the effect of diet and hygiene on the dentition.

Pediatric Dentistry Available as a M.S.D. degree program (hospital-based). Minor concentration: public health.

Core Competencies

Students who successfully complete the two-year postdoctoral pediatric dentistry program will demonstrate competency in the following areas:

*Clinical Skills and Knowledge*The successful graduate will be able to:

1. Diagnose and provide dental treatment to the child and adolescent patient.
2. Manage the dental patient with the use of non-pharmacologic and pharmacologic management techniques.
3. Provide comprehensive management of the disabled patient.

*Critical Thinking*The successful graduate will be able to:

1. Draw upon evidence-based literature to select and justify appropriate treatment.
2. Learn the dental care systems, both public and private sectors.
3. Successfully complete and present research relevant to the specialty of pediatric dentistry.

*Effective Communication*The successful graduate will be able to:

1. Present appropriate treatment plans to patients and family members.
2. Present accurate oral and written reports to referring physicians and dentists.
3. Draw upon the latest evidence-based literature to provide education and oral hygiene instructions to patients, and interpret and present the findings of medical and laboratory reports.

PeriodontologyAvailable as a M.S.D degree program. Minor concentration: oral pathology.

Core Competencies

Students who successfully complete the three-year postdoctoral periodontology program will demonstrate competency in the following areas:

*Clinical Skills and Knowledge*The successful graduate will be able to:

1. Diagnose and treat diseases affecting the periodontium.
2. Demonstrate competency in a wide variety of surgical techniques used in treatment of periodontal diseases.
3. Demonstrate competency in all aspects of surgical placement of dental implants including implant site development.
4. Describe the relationship between material characteristics and clinical performance of dental biomaterials.

*Critical Thinking*The successful graduate will be able to:

1. Draw upon evidence-based research to select and justify appropriate treatment methods and biomaterials.
2. Formulate hypotheses and design the necessary experiments for a given procedure or material evaluation scenario.

*Effective Communication*The successful graduate will be able to:

1. Present appropriate treatment plans to patients and referring dentists correctly in oral and written reports.
2. Provide evidence-based arguments on research findings in oral and written reports.
3. Provide patient education and oral hygiene instructions to patients based on clinical findings and current periodontal literature.

*Research*The postdoctoral periodontology program will also prepare the graduate to conduct all phases of a research project, including protocol development, review of literature, management of all stages of the study, and preparation of a manuscript for publication.

ProsthodonticsAvailable as a M.S.D. degree program. Minor concentration: dental materials.

Core Competencies

Students who successfully complete the three-year postdoctoral program in prosthodontics will demonstrate competency in the following areas:

*Clinical Skills and Knowledge*The successful graduate will be able to:

1. Diagnose, treatment plan, and rehabilitate dentate, partially edentulous, and completely edentulous patients having clinical conditions associated with missing or deficient teeth and/or oral and maxillofacial tissues using biocompatible substitutes.
2. Be competent in a wide variety of treatment modalities utilized in the treatment and/or rehabilitation of dentate, partially edentulous, and completely edentulous patients.
3. Be competent in all aspects of the restoration of dental implants.

4. Be competent in all aspects of occlusion and the prosthodontic management of TMD/TMJ disorders and/or orofacial pain.
5. Be competent in the laboratory procedures associated with the treatment of complete edentulism, partial edentulism, and dentate patients.
6. Describe the relationship between material characteristics and clinical performance of dental biomaterials.

*Critical Thinking*The successful graduate will be able to:

1. Draw upon evidence-based research to select and justify appropriate treatment methods and biomaterials.
2. Formulate hypotheses and design the necessary experiments for a given procedure or material evaluation scenario.

*Effective Communication*The successful graduate will be able to:

1. Present appropriate treatment plans to patients and referring dentists in oral and written reports.
2. Provide evidence-based agreements on research findings in oral and written reports.
3. Provide patient education and oral hygiene instructions to patients based upon clinical findings and upon current prosthodontic literature

Learn more about the Master of Science in Dentistry (M.S.D) and Master of Science (M.S.) in Dental Materials, and Ph.D. in Dental and Oral Health Science degrees at Indiana University School of Dentistry.

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Master's Degrees

Indiana University School of Dentistry offers Master of Science in Dentistry (M.S.D) degrees to those who hold a doctorate in dentistry (D.D.S. or D.M.D.) and are ready to take the next step on their career path. The Master of Science (M.S.) in Dental Materials degree is designed for those who do not hold a doctorate in dentistry and wish to gain advanced knowledge of research and methodology for dental materials applications.

Learn more about the M.S. and M.S.D. degree programs

- Admissions
- Tuition and Fees
- Degree Requirements
- Faculty Advisory and Research Committees

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Admissions

Please refer to M.S.D. "How to Apply" section and the M.S. "How to Apply" section on the Indiana University School of Dentistry (IUSD) website for a comprehensive description of the admissions process and procedures for the Master of Science in Dentistry (M.S.D) and Master of Science (M.S.) in Dental Materials degree programs.

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.

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, offered by the American Dental Education Association (ADEA) and the Postdoctoral Dental Matching Program, administered by National Matching Services, Inc. These two national services are 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 the 2025-2026 academic year, five IUSD graduate degree programs are participating in both PASS and Dental Match: oral and maxillofacial surgery, orthodontics, pediatric dentistry, periodontics, and prosthodontics. The endodontics graduate degree program is participating in PASS.

Candidates may contact the IUSD Office of Graduate Education by emailing dsgrad@iu.edu or the appropriate program director to obtain more information about application deadlines, national application services, and other details related to the application process.

Learn more about Indiana University School of Dentistry's M.S. and M.S.D. degree programs and review the tuition and fees, degree requirements, and faculty advisory and research committees.

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Tuition and Fees

Tuition is paid at the time of registration and is subject to change by action of the Trustees of Indiana University. All students applying for admission to the School of Dentistry are required to pay an Application Fee of $ $80.00 in U.S. dollars (check or money order). This fee is paid only once, is nonrefundable, and is not applied to other fees.

Please refer to the "Costs & Financial Aid" section of the Indiana University School of Dentistry (IUSD) website for a comprehensive description of the tuition, fees, and types of costs associated with all academic programs, including the Master of Science (M.S.) in Dental Materials and Master of Science in Dentistry (M.S.D.) degree programs.

Learn more about how to apply to Indiana University School of Dentistry's M.S. and M.S.D. degree programs and review the degree requirements and faculty advisory and research committees.

Updated April 2025

Faculty Advisory and Research Committees

Each graduate program degree candidate at Indiana University School of Dentistry is assigned to a faculty advisory committee. The committee is chaired by the chairperson of the candidate's major subject (or the chairperson's designee) and is composed of the chair and at least two additional members of the Indiana University School of Dentistry, Indiana University, or Purdue University graduate faculty, including at least one additional faculty from the student's major department, one from each minor, and one from outside the student's program of study, if deemed appropriate. The functions of the advisory committee are to:

1. Approve the student's program of study
2. Counsel the student until the qualifying (oral and written comprehensive) examination is passed;
3. Compose and grade the qualifying examination.

At Indiana University, students have traditionally submitted a research thesis to complete their M.S.D. degree requirements. Requirements were modified in February 2004 to give program directors the option of permitting M.S.D. degree candidates to prepare their research either as a thesis, or in the form of a manuscript that must subsequently be submitted for publication in a refereed journal. The student's program director determines which option the student will pursue.

Following successful completion of the qualifying examination, the student will be permitted to complete the thesis or journal manuscript research under the direction of his or her research committee. The research committee may or may not have the same composition as the faculty advisory committee. The research committee is chaired by the faculty member who directs the thesis or journal manuscript research (chosen by the student with the consent of the chair of the faculty advisory committee) and is composed of the chairperson and at least two additional members of the Indiana University School of Dentistry, Indiana University, or Purdue University graduate faculty with at least one additional faculty from the student's major department and one from each minor department. The committee should be selected from the members of the graduate faculty who are best qualified to assist the student in conducting the thesis or journal manuscript research. The research committee is responsible for supervising the research, guiding the preparation of the thesis or journal manuscript, and conducting and approving the thesis or journal manuscript defense.

Once the faculty advisory and research committees have certified that the student has completed the academic and research requirements, the director of the graduate program will certify the student for graduation and direct the graduate program recorder to order the diploma.

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Degree Requirements

Requirements for the Indiana University School of Dentistry (IUSD) M.S. degree are outlined in the Indiana University Indianapolis Graduate School academic bulletin. Requirements for the M.S.D. degrees are as follows:

CourseworkStudents must complete the required number of credit hours of coursework specific to the graduate program. A minimum of six (6) credit hours must be earned toward a minor subject outside the major concentration.
Other elective subjects may be selected, based on the student's educational objectives. A total of six (6) credit hours must be in research; however, additional research credit cannot be used toward fulfillment of requirements for the degree.

All students enrolled in Indiana University School of Dentistry's M.S.D. program are required to submit a research proposal to the IUSD Graduate Student Research Committee (GSRC) prior to beginning the experimental or data collection phase of their research projects. Prior to this, the student's research committee must review and approve the proposal. Preliminary review of the literature, selection of a research topic and submission of the research proposal to the GSRC should ordinarily be completed by the end of the first spring semester of the program. The IUSD GSRC consists of members of the faculty who are active in research and are willing to provide significant guidance in reviewing research proposals.

It is the goal of the proposal review process to provide qualified feedback to the principal investigator and student on the scientific merit of the project. The school has a vested interest in encouraging students and faculty to prepare well-justified and competitive proposals, research publications, and both internal and external grant applications related to their work. A secondary goal of this process is to improve the external funding support the school receives by improving the quality of student pilot projects that can provide preliminary data for external grant proposals from principal investigators.

Each student must present at the IUSD Research Day event prior to graduation.

Each student must satisfactorily complete the project and submit an approved thesis or journal manuscript.

Core Courses All graduate students enrolled in Indiana University School of Dentistry programs (including M.S. degree candidates) are required to complete six core courses, as designated by the IUSD graduate education program. These courses are:

- G907 Clinical Oral Pathology Conference I
- G909 Clinical Oral Pathology Conference II
- G910 Seminar (Biostatistics)
- G948 Advanced Radiology
- R955 Graduate Oral Biology I
- R980 Research Methodology

The core courses are in addition to courses that are required by individual departments.

Required courses must be taken in the proper sequence, as specified by the student's committee. In most departments there are additional program requirements designed to meet such criteria as may be specified by the several dental specialty boards and the American Dental Association Commission on Dental Accreditation

Standards for Advanced Specialty Education Programs. The final credit requirement, including elective course work, is determined by each student's graduate committee and is usually dependent upon the student's previous academic accomplishments.

GradesFailure to maintain a minimum grade point average of 3.0 (on a 4.0 scale) in either the major or minor concentration and/or failure to demonstrate evidence of continuing professional growth may subject the student to dismissal from the program.

ExaminationsThe members of the student's faculty advisory committee will conduct the qualifying (oral and written comprehensive) examination, which essentially covers the candidate's field of study. The exact format of the examination will be determined by the individual faculty advisory committee and described in an educational agreement signed by the student and department chairperson at the beginning of the program. Successful completion of the qualifying examination is required in order to proceed to completion of the thesis or journal manuscript research, defense of the thesis or journal manuscript, and awarding of the degree. In accordance with Indiana University Indianapolis Graduate School requirements, students who fail the qualifying examination are normally allowed only one retake. The student must complete the qualifying examination six months prior to the intended date of graduation. The student is eligible but not required to take the examination upon the completion of one-half of the didactic requirements.

English Proficiency All graduate students for whom English is not the first language must take the English for Academic Purposes (EAP) Placement Test at the beginning of their dental school program. Students must satisfactorily complete all English courses required as a result of performance on the EAP test before a certificate or degree can be awarded. The required English courses must be completed during the first year of study.

All graduate students whose first language is not English must be tested for oral English language competency before they are given any appointment having direct student contact. Students' oral language proficiency will be assessed using the SPEAK Test, a pronunciation test that is also offered by the EAP Program. If the results of the SPEAK Test indicate that the student must take one or more English courses, these courses must be paid for by the student and must be satisfactorily completed before the student will be allowed to teach.

These tests are offered on the IU Indianapolis campus by the EAP Program in the Department of English in the School of Liberal Arts. Questions about EAP may be directed to esl@iu.edu.

Continuing Enrollment Students who have passed the qualifying examination and completed two years as a full-time student must enroll each semester (excluding summer sessions for off-campus students) for any remaining required course work or research credits. Once students have accumulated the number of credit hours required by the particular graduate program, they must enroll for a minimum of one (1) hour of graduate credit each semester until the degree is completed. Failure to meet this requirement will automatically terminate the student's enrollment in the degree program. All requirements for the master's degree must be completed within five consecutive years.

Time Limits and Revalidation Master's degree programs at Indiana University School of Dentistry comply with Indiana University Indianapolis Graduate School requirements regarding time limits and course revalidation. Thus, as a rule, a course may not be counted toward degree requirements if it has been completed more than five years prior to the awarding of the degree for master's students. The advisory committee, however, may recommend to the dean that coursework taken prior to the above deadlines be revalidated if it can be documented that the knowledge contained in the course remains current. Examples of such documentation may include: passing an examination specifically on the material covered by the course; passing a more advanced course in the same subject area; passing a comprehensive examination in which the student demonstrates substantial knowledge of the content of the course; teaching a comparable course; or publishing scholarly research demonstrating substantial knowledge of the content and fundamental principles of the course. Each course for which consideration for revalidation is being requested should be justified separately.

Students who do not complete all the M.S. or M.S.D. degree requirements within five (5) years will be given a maximum of one additional year to revalidate courses and complete all requirements. The enrollment of any student who fails to fulfill these requirements will be automatically terminated at the end of that year.

In the event the coursework cannot be revalidated or the thesis or journal manuscript cannot, in the opinion of the advisory committee, be completed by the deadline stated above, the student, upon the advice of the advisory committee, may be awarded a certificate of completion of a curriculum in postgraduate study, or a certificate of attendance, whichever is deemed appropriate by Indiana University School of Dentistry. Please note, however, that programs are not required to grant such certificates. Students shoudl refer to the individual program educational agreements for specifics.

M.S.D. Thesis or Journal Manuscript The results of the M.S.D. degree research must be presented to the student's research committee either in traditional thesis form, or as a manuscript that will be submitted to a peer-reviewed journal. The research committee must approve the thesis before the student submits the thesis electronically to the IU Indianapolis institutional repository, IU Indianapolis ScholarWorks. Students must also submit a bound thesis to their major and minor departments. If the manuscript option is selected in lieu of the thesis, the research committee and the research mentor must approve both the manuscript and the journal it is intended for before the manuscript can be submitted to the journal.

Learn more about how to apply to Indiana University School of Dentistry's M.S. and M.S.D. degree programs and review the tuition and fees and faculty advisory and research committees.

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Ph.D. Program

Indiana University School of Dentistry (IUSD) offers two stand-alone terminal degree programs, a Dcotor of Dental Surgery (D.D.S.) degree and a Doctor of Philosophy (Ph.D.) degree. In addition, the school offers an integrated dual degree D.D.S/Ph.D. program. All three programs are the only ones of their kind offered at any other school in Indiana.

The objective of the Ph.D. in Dental and Oral Health Science degree program is to provide a core curriculum that offers a solid scientific base for a career in research and/or teaching in the dental sciences of today and the future. Graduates of the Ph.D. degree program should be ideal candidates for positions in any school of dentistry and related schools as well as for for positions in research laboratories within government and private institutions.

Indiana University School of Dentistry also offers a D.D.S./Ph.D. dual degree program that incorporates aspects of both the Doctor of Dental Surgery (D.D.S.) and the Ph.D. in Dental and Oral Health Science programs.

Learn more about the Ph.D. in Dental and Oral Health Science degree program

- Admissions
- Tuition and Fees
- Degree Requirements
- Curriculum Overview
  - Oral Biology Core Curriculum
  - Preventive Dentistry Core Curriculum
  - Dental Materials Core Curriculum

Contact the Ph.D. Program Director
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Admissions

Description of Program
The Indiana University School of Dentistry (IUSD) Ph.D. in Dental and Oral Health Science degree program is focused on basic and clinical science areas as they relate to the human organism and on the effect of dental materials on cariology, molecular biology and etiology, and pathogenesis. Individuals with this type of training can be expected to pursue academic teaching and/or research positions in dental schools, medical schools and other science departments, in addition to training that will be suitable for industrial research positions. Individuals with combined D.D.S./Ph.D. training would be highly recruited to academic positions.

The Ph.D. program includes courses in biostatistics, research ethics, research communications and effective teaching methods. The course in biostatistics emphasizes the important role of appropriate statistical methods used in biological research. The research ethics course addresses the importance of a strong ethical approach to the scientific method and human and animal research. The research communication course is a multidisciplinary course that will increase the ability of the student to write and review scientific papers. The teaching methods course requirement recognizes that most of our students will ultimately teach in an academic environment and may have no previous coursework in education. In addition, students will be required to complete the Preparing Future Faculty and Professionals (PFFP) Program.

Research Capabilities Indiana University School of Dentistry has significantly increased its commitment to research including external grant and contract support. In addition, several of our faculty have established jointly funded projects with faculty in the Indiana University School of Medicine and the School of Engineering along with joint academic appointments for teaching purposes. Multidisciplinary approaches are highly valued at Indiana University School of Dentistry. This heavy research emphasis from our faculty has recently led to significant increases in faculty commitment to research, released time for research and recruitment of research-oriented faculty. Since 1993, Indiana University School of Dentistry has completely renovated numerous research laboratories into state-of-the-art facilities that are occupied by funded investigators.

Student Population The Ph.D. in Dental and Oral Health Science degree program is open to dental school graduates with a minimum dental school GPA of 3.0/4.0 (as well as individuals with a B.S. degree) and a minimum GRE score of 600 in either the verbal, quantitative or analytical sections. In addition, a TOEFL score of no lower than 550 must be obtained for applicants from non-English speaking countries.

Program Requirements All general requirements of the Indiana University Indianapolis Graduate School Bulletin apply plus specific requirements of this program, as outlined in the core curricula.

Enrollment and Financial Support Enrollment in the Ph.D. degree program is limited with respect to the number of appropriate faculty available to serve as research mentors. In general, an average ratio of one student to one graduate faculty member is recommended.

Acceptance criteria includes applicants being ranked by grade point averages, GRE scores, previous research experience, and research publications as well as screening interviews. Financial support is primarily the responsibility of the student. However, several fellowships may be available.

Time Limits and Revalidation All Ph.D. work offered in partial fulfillment of degree requirements must either have been completed within seven consecutive calendar

years of the passing of the qualifying examination or be revalidated.

Any student whose candidacy lapses will be required to apply to the Indiana University Indianapolis Graduate School for reinstatement before further work toward the degree may formally be done. To be reinstated to candidacy in the Indiana University Indianapolis Graduate School, the student must complete the following:

1. Obtain the permission of the program director.
2. Fulfill the program requirements in effect at the time of the application for reinstatement.
3. Pass the current Ph.D. qualifying examination or its equivalent (defined in advance).
4. Request reinstatement to candidacy from the dean. Such reinstatement, if granted, will be valid for a period of three years, during which time the candidate must enroll each semester for a minimum of one credit hour.

In the fifth semester, students meet with their examination committee to review past performance and to evaluate plans for completing the Ph.D., including the written, oral, and research components. All full-time Ph.D. students must take the qualifying examination by the end of the fifth semester.

Satisfactory Progress Toward a Degree After passing the qualifying examination, for a student to remain in “good standing”, the Ph.D. program requires that sufficient progress be made toward completing a dissertation. If the research advisory committee judges progress to be unsatisfactory, probation may be recommended. At the end of the probationary period (usually a semester), probation will be lifted if the advisory committee judges the student’s progress to be satisfactory. If the advisory committee judges the student’s progress to remain unsatisfactory, then the student will be required to leave the program.

Continuing Enrollment Students who have passed the qualifying examination must enroll each semester (excluding summer sessions) for any remaining required course work or dissertation credits. Once such students have accumulated 90 credit hours in completed course work and deferred dissertation credits, they must enroll for a minimum of 1 hour of graduate credit each semester until the degree is completed. Failure to meet this requirement will automatically terminate the student’s enrollment in the degree program.

A candidate who will be graduating in June, July, or August of any year must enroll in a minimum of 1 hour of credit in either the current or immediately preceding summer session.

Learn more about Indiana University School of Dentistry's Ph.D. degree program and review the tuition and fees, degree requirements, and curriculum.

Updated April 2025

Tuition and Fees

Please refer to the "Costs & Financial Aid" section of the Indiana University School of Dentistry (IUSD) website for a comprehensive description of the tuition, fees, and types of costs associated with all academic programs, including the Doctor of Philosophy (Ph.D.) Dental and Oral Health Science degree program.

Tuition is paid at the time of registration and is subject to change by action of the Trustees of Indiana University. All students applying for admission to the School of Dentistry are required to pay an Application Fee of $ $80.00 in U.S. dollars (check or money order). This fee is paid only once, is nonrefundable, and is not applied to other fees.

Learn more about how to apply to Indiana University School of Dentistry's Ph.D. degree program and review the degree requirements and curriculum.

Updated April 2025

Curriculum Overview

Major Coursework
Students enrolled in the Indiana University School of Dentistry Ph.D. in Dental and Oral Health Science degree program can select coursework that falls under three major focus areas:

- Oral Biology Core Curriculum
- Preventive Dentistry Core Curriculum
- Dental Materials Core Curriculum

Students performing multidisciplinary research can also select choose coursework from across different focus areas. The total course requirement is 90 credits, 12 of which will form the Minor focus area.

Minor Coursework
The minor consists of 12 credit hours in any one of the advanced basic science courses (anatomy, biochemistry, biomedical engineering, chemistry, materials science engineering, mechanical engineering, microbiology and immunology, pathology, pharmacology, physics, physiology, life science) or their equivalents, as approved by the student’s advisory committee and the chairperson of the minor department. Credit hours for the required courses may not count toward the minor courses.

Research*Laboratory Rotations*
R957 Introduction to Research in Oral Biology (3 cr.); at least three separate rotations(two to four months each) conducting small projects in the laboratories of IU graduate faculty members. Projects will be graded. Students in all tracks enroll in this course once. It is expected that the student will choose a dissertation advisor (mentor) from these faculty members.

Laboratory Research
R958 Research: Oral Biology (1-12 cr. hrs./semester); G930 Research: Preventive Dentistry (1-12 cr. hrs./semester); or G921 Research: Dental Materials (1-12 cr. hrs./semester). Credit for research is directly related to the writing and defense of a Ph.D. dissertation.

G901 Dissertation Research
Once 90 total credits have been accumulated in the appropriate areas, students must apply for admission to candidacy. Once approved, students may enroll in the G901 dissertation research course to complete the dissertation research and defense. The student must enroll in G901 each semester (Fall, Summer, Spring) until the dissertation is complete. However, enrollment in G901 is limited to a maximum of six semesters, with permission

of the dissertation committee. Students must be enrolled for at least 1 credit hour each semester.

Research Credits
The remainder of 90 credit hours after required and minor courses.

Other Courses
Selection of other courses is determined by requirements of the chosen minor, research committee, and/or advisory committee.

Ph.D. Curriculum for the D.D.S./Ph.D. Dual Degree Program
The Ph.D. curriculum for the D.D.S./Ph.D. dual degree program remains essentially the same as that of students enrolled in the stand-alone Ph.D. program. However, dual degree students may be able to take advantage of shared course credits from the D.D.S. curriculum.

The following courses in the D.D.S. curriculum are eligible for credit sharing with the Ph.D. curriculum, depending on the chosen major focus area of the Ph.D. degree. Students will need to request permission from the Ph.D. Program Director, Advisory Committee and Office of Student Affairs and Admissions prior to approval.

Oral Biology

- D505 Principles of Ethics and Behavioral Science (1.5 cr.)
- D510 General Microbiology, Infectious Diseases, & Antimicrobial Therapy (3 cr.)
- D512 Molecular Cell Biology (3 cr.)
- D513 Head and Neck Anatomy Dissection Lab (1 cr.)
- D515 Systems Approach to Biomedical Sciences I (5 cr.)
- D532 Single Tooth Direct Restorations Lecture (1 cr.)
- D615 Systems Approach to Biomedical Sciences II (5 cr.)

Preventive Dentistry

- D505 Principles of Ethics and Behavioral Science (1.5 cr.)
- D504 Dental Public Health (1 cr.)
- D520 Risk Assessment, Prevention, & Early Management Dental Disease (2 cr.)
- D630 Clinical Applications of Cariology and Operative Dentistry I (1 cr.)
- D631 Clinical Applications of Cariology and Operative Dentistry II (1 cr.)

Dental Materials

- D505 Principles of Ethics and Behavioral Science (1.5 cr.)
- D534 Dental Materials (2 cr.)
- D537 Introduction to Operative Dentistry (0.5 cr.)
- D532 Single Tooth Direct Restorations Lecture (1 cr.)
- D533 Single Tooth Direct Restorations Lab (2 cr.)
- D535 Single Tooth Indirect Restorations Lecture (1.5 cr.)
- D536 Single Tooth Indirect Restorations Lab (2.5 cr.)

Learn more about how to apply to Indiana University School of Dentistry's Ph.D. degree program and review the tuition and fees and degree requirements.

Updated April 2025

Degree Requirements

General Information
Ninety credit hours are required for the Indiana University School of Dentistry (IUSD) Ph.D. in Dental and Oral Health Science degree with 32-40 required course credits in a major focus area and 12 credits in a minor focus area. Disciplines included in the program are anatomy, biochemistry, biomedical engineering, biostatistics, cell biology, chemistry, immunology, materials science engineering, mechanical engineering, microbiology, molecular biology, pathology, physics and physiology.

The Ph.D. degree research focus areas contain courses in biostatistics, research ethics, research communications, and effective teaching methods. The courses in biostatistics emphasize the important role of appropriate statistical methods used in biological research. The research ethics course addresses the importance of a strong ethical approach to the scientific method and human and animal research. Research Communications is a multidisciplinary course that will increase the ability of the student to write and review scientific papers. The teaching methods courses recognize that most of our students will ultimately teach in an academic environment and may have no previous course work in education.

All general requirements of Indiana University Indianapolis Graduate School apply to the Ph.D. in Dental and Oral Health Science program, plus specific requirements of the program as outlined in the core curricula. All Ph.D. coursework offered in partial fulfillment of degree requirements must either be completed within seven consecutive calendar years of the passing of the qualifying examination or be revalidated. Any student whose candidacy lapses will be required to apply to Indiana University Indianapolis Graduate School for reinstatement before further work toward the degree may formally be done. To be reinstated to candidacy, the student must: (1) obtain permission of the program director; (2) fulfill the program requirements in effect at the time of the application for reinstatement; (3) pass a current Ph.D. qualifying examination or its equivalent which will be defined in advance; and (4) request reinstatement to candidacy from the Dean of the Indiana University Indianapolis Graduate School. Such reinstatement, if granted, is valid for a period of three years, during which time the candidate must enroll each semester for a minimum of one credit hour.

English Proficiency Students who are nonnative speakers of English must take the English for Academic Purposes (EAP) Placement Test at the beginning of their dental school program. Students must satisfactorily complete all English courses required as a result of performance on the EAP test before a certificate or degree can be awarded. The required English courses must be completed during the first year of study. The test is offered on the IU Indianapolis campus by the EAP Program in the Department of English in the School of Liberal Arts. Questions about the EAP Program may be directed to esl@iu.edu.

Continuing Enrollment Students who have passed the qualifying examination must enroll each semester (excluding summer sessions) for any remaining required course work or dissertation credits. Once such students have accumulated 90 credit hours in completed course work and deferred dissertation credits, they must enroll for a minimum of one hour of graduate credit each semester (excluding summer sessions) until the degree is completed. Failure to meet this requirement will automatically terminate the student's enrollment in the degree program.

A candidate who will be graduating in June, July, or August of any year must enroll in a minimum of one hour of credit in either the current or immediately preceding summer session.

Academic Warning for the Ph.D. Program For Ph.D. courses to meet graduation requirements, a grade of B- or better must be earned. Courses where a lower grade has been earned must be retaken for the student to meet graduation requirements and the student will receive an academic warning from the IUSD. Students will automatically be placed on academic warning if their cumulative GPA falls below 3.0 and/or if they have received a grade lower than the minimum required for their program of study, unless extenuating circumstances are submitted by the course instructor via the grade report.

The Ph.D. Program Academic Progress Review Committee will consist of a minimum of two IUSD graduate faculty and well as the IUSD PhD Program Director and the Associate Dean for Graduate Education, along with the Ph.D. Chair of the Advisory or Dissertation Committee. A warning will be issued to a student via email by the IUSD Office for Graduate Education. The student will be notified in writing and documentation will be placed in the student's file. The student will be given appropriate due-process and the ability to remediate. If the deficiency is not corrected after one semester or if the required standards are not met by the timeframe stipulated in the written probation letter, dismissal may be recommended. If a student is enrolled in the dual-degree D.D.S./Ph.D. program, the Academic Progress Review Committee will also be consulted. The committee members will determine whether a student is allowed to continue in the dual-degree D.D.S./Ph.D. program, transition to either the D.D.S. or Ph.D. program, or be dismissed.

Probation for the Ph.D. Program The Ph.D. Program Academic Progress Review Committee may recommend probation for any student who has not corrected the deficiency which resulted in the warning. A student on academic probation is expected to meet the required standards by the timeframe stipulated in the written letter. Failure to meet the required academic standards can result in dismissal from the program.

Dismissal from the Ph.D. ProgramA student who has failed to meet the minimum GPA requirement in a Ph.D. course or appropriate research milestones will be terminated from the program. If a student does not complete the D.D.S./Ph.D. dual degree program, the D.D.S. credits earned will still count toward D.D.S. degree. Academic progress and promotion will be determined by the respective Progress Committees independently. The IUSD Office for Graduate Education will provide email notification to the student as well as a written letter by certified postal mail notifying the student of termination from the program.

The policy of the Graduate Faculty is that students may be dismissed for failure to maintain adequate academic progress toward the degree. For candidates, this standard is set by the faculty of each program or by the student's dissertation committee. The student must first be notified of deficient academic progress by being placed on probation for one semester. If the deficiency is not corrected, the student may be dismissed.

Policy for IUSD Graduate Student Leave of Absence Graduate students pursuing a Ph.D. or M.S. degree at Indiana University School of Dentistry (IUSD) are required to be continuously enrolled in credit-earning graduate courses for all semesters during each year of the program. Individuals enrolled in the Ph.D. in Dental and Oral Health Sciece degree, the D.D.S./Ph.D. dual degree and the M.S. degree programs will be required to adhere to all leave of absence policies established by IUSD Office of Graduate Education and IU Indianapolis Graduate School.

It is understood that graduate students must occasionally be absent from class, clinic or laboratory for unavoidable personal reasons. At such times, Ph.D. students are expected to contact the IUSD Office of Graduate Education as early as possible to report an absence. The IUSD Office of Graduate Education will then notify the research mentor and Ph.D. program director regarding the absence and its general nature. For research related activities, the graduate student must work with their research mentor or program director to determine procedures to minimize long term impact on ongoing research studies.

Students enrolled in the D.D.S./Ph.D dual degree program will also need to observe all leave policies applicable to D.D.S. students as outlined in the D.D.S. student handbook, and must contact the IUSD Office of Student Affairs and Admissions, who will then notify D.D.S. course directors regarding the absence and its general nature. It is the responsibility of the student to coordinate missed assignments and makeup quizzes with course directors and make alternative arrangements for ongoing research activity with research mentors. These alternative arrangements must be made in a timely fashion. A student who is absent and fails to communicate their absence in a timely manner is accountable for any negative outcomes based on the existing attendance policies. The IUSD Office of Student Affairs and Admissions only determines whether an absence is excused or unexcused when an assessment is involved.

For more information, please refer to the IUSD Policy for Graduate Leave of Absence, which includes all guidelines for all attendance absences, including the vacation policy for Ph.D. students. The complete policy is available from the IUSD Office for Graduate Education and the Director of Ph.D. Training and Research Development.

Student Advisory Committee The Ph.D. student, in consultation with the student's major department and the IUSD Office of Graduate Education will select the advisory committee in the first semester of program start, and no later than one year after admission to the Ph.D. program. The role of the Advisory Committee is to guide

and approve the student's didactic program of study and counsel the student through the early phases of the Ph.D., through to the end of passing the qualifying examination. This committee will be responsible for monitoring the student's progress, and for advising the student with regards to all matters associated with the graduate program. The committee will advise the student regarding the selection of the research rotation mentors and guide the research proposal development, which generally becomes the student's research area for the dissertation. The Advisory Committee will be minimally composed of at least five members: Of these, three or four members must be IUSD faculty, two of whom must be members of the Indiana University Indianapolis Graduate School faculty. It is recommended that one member be the student's intended dissertation mentor. One additional member of the committee must be outside of the School of Dentistry and be Graduate School faculty (this individual is generally the Chair of the Minor). The student has the option to keep the same individuals on both the Advisory Committee and Dissertation Committee. If so, one additional committee member who is an expert in the student's field of research and is outside the Indiana University system (external committee member) should be added to the dissertation committee.

Prior to the student's qualifying exam (generally by the second summer following enrollment), two additional advisory committee members will be added from the student's minor field and/or from the general area in which the student has decided to conduct his or her dissertation research. This committee of five serves as the qualifying exam committee, with a member other than the dissertation mentor serving as chairperson.

Qualifying Examination for Admission to Candidacy The qualifying examination assesses the students research aptitude and critical thinking skills necessary to complete the requirements and intellectual rigors of the Ph.D. The qualifying exam consists of two major parts: 1) writing and presenting an oral defense of a research proposal, and 2) completion a written exam.

*1) Research Proposal & Oral Defense*The research proposal generally serves as the student's dissertation proposal. After completion of the research proposal and oral defense, all committee members will provide a pass/fail grade along with written comments. After the student has passed the proposal oral defense, they will be instructed to complete a written exam within 60 days of the oral defense. The written exam will be reviewed by the student's Advisory Committee and the Ph.D. Program Director. A pass/fail grade along with written feedback will be provided to the student. Examination of the students chosen minor field of study is at the discretion of the minor field department in collaboration with the Ph.D. Program Director and the student's Advisory Committee. The student chooses, with the help and approval of the advisory committee chairperson, a topic for a grant proposal to be written and defended as part of the qualifying exam. This is usually done by the end of the second spring semester following enrollment. The proposal topic is generally in the focus area of the student's intended dissertation research and cannot be prepared as a requirement for another graduate course.

Students should begin with an outline (Specific Aims, 1 page in length) for a research proposal that is approved by the chairperson of the Advisory Committee and student's research mentor. After approval of the Specific Aims page, the student generally writes a proposal in the style of a National Institutes of Health (NIH) grant. The following sections must be included: specific aims, background, significance, impact, research design and methodology, limitations and alternative strategies, statistical considerations, animal and/or human studies description, literature cited, and proposed budget. The length will be between 8 and 12 single-spaced pages, written in no less than 11-point font size. The page limit does not include the animal and/or human studies description, literature cited, and the proposed budget, which have no page limits. Note: If the student has written an external grant application (such as the NIH-F30/F31 mechanism which has a 6 page science limit), the same general proposal can be used as the basis for the qualifying proposal. However, the proposal will need to be expanded in key areas, including background, methodology and approach (max 12 page limit) to ensure that the breadth and depth of knowledge of their proposed research area is appropriately detailed and demonstrated in the proposal.

The completed proposal is submitted to the committee chair and distributed to the rest of the committee. The committee will be given a minimum of 4 weeks to review the completed proposal prior to the qualifying exam. The student can receive feedback from members of the advisory committee. Please note that the qualifying proposal must be primarily the work of the candidate. Once distributed to the Advisory Committee, the committee will decide whether the proposal is defensible or in need of revisions prior to the defense. Upon final approval, a date and time is set for the student to defend the qualifying proposal in the presence of the committee.

The defense of the proposal consists of a 30- to 45-minute presentation of the proposed work by the student, followed by a one- to three-hour oral examination consisting of questions arising from the proposal, the student's presentation, or answers to initial questions.

Satisfactory defense of the proposal will be followed by a written exam at a date and time convenient to the members of the committee and student (within 60 days after the proposal defense). Students who do not satisfactorily complete the proposal defense may be allowed to retake it with the permission of the advisory committee.

*2) Written Examination*Each member of the advisory committee submits a comprehensive question(s) in their area(s) of expertise to the committee chairperson, who then collates the questions and administers the exam. The exam package is administered to the student on the morning of the exam (generally 8:00 a.m). The exam will be open-book, and the student can use any literature resources, which must be cited. However, artificial intelligence and any human interference or assistance is strictly not permitted. The completed exam should be returned (emailed) to the Advisory Committee Chair, generally within 8 hours of starting the exam. Extensions beyond 11:59 p.m. on the exam day will not be permitted.

The chairperson will distribute the answers to individual committee members for comments, corrections, feedback, and grading. Comments will be returned to the student

generally within 10 business days of receiving the exam. Students who do not satisfactorily complete the written exam may be given permission by the advisory committee to repeat the written exam once. In this case, the committee may decide to give the same questions or modify the exam questions. Students who fail components of the qualifying exam are normally allowed to retake the exam once.

Note that the qualifying exam must be completed at least eight months before the degree is awarded, and only after completing all remaining milestones of the Ph.D. program. Some programs may have deadlines which are earlier than those of the Indiana University Indianapolis Graduate School; therefore, students will consult with their program office.

Admission to Candidacy It is anticipated that the Ph.D. student will complete the Ph.D. Qualifying Exam by the end of the second year (or third year of the dual degree D.D.S./Ph.D. program). Students who have completed all major and minor coursework and have passed all parts of the Qualifying Exam will be recommended for admission to candidacy. The student's advisory committee submits a Nomination to Candidacy form to the Indiana University Indianapolis Graduate School after the student has completed all required didactic courses and passed the qualifying exam.

Research Committee Members of the advisory committee may continue to serve as members of the student's dissertation committee. However, the latter committee is chaired by the student's research mentor, who must be a member of the Indiana University Indianapolis Graduate School faculty with endorsement to direct doctoral committees.

The research committee is minimally composed of three IUSD research faculty members, one member of the Graduate School faculty outside of the School of Dentistry (this individual is generally the Chair of the Minor) and an expert in the student's field of research outside Indiana University (external committee member). The outside member must meet the requirements of membership and be given "limited status" by the Graduate School. At least half of the members of the dissertation committee must be members of the Graduate School faculty with endorsement; others may be members either with or without endorsement.

The research committee is responsible for supervising the student's research, reading the dissertation and providing scientific and editorial comments on its content, and conducting the final examination (defense of dissertation). The research committee, except for the outside member, typically meets formally with the student twice annually to assess progress and make appropriate suggestions. During one of these assessments, most likely during the third or fourth year but usually at least six months prior to the completion of the dissertation, the student will give a 45–50 minute oral presentation open to all dental school faculty, followed by a closed one- to three-hour oral examination on the dissertation by the dissertation committee.

Learn more about how to apply to Indiana University School of Dentistry's Ph.D. degree program and review the tuition and fees and curriculum.

Updated April 2025

Oral Biology Core Curriculum

Required Courses All courses listed below are required plus 12 minor credits.

BiochemistryChoose one.

- BIOC B500 Introduction to Biochemistry (3 cr.)
- BIOC B800 Medical Biochemistry (3 cr.) plus GRAD G817 Eukaryotic Cell Biology (2 cr.)
- D515 Systems Approach to Biomedical Sciences I (5 cr) plus D615 Systems Approach to Biomedical Sciences II (5 cr)

MicrobiologyChoose one.

- MICR J822 General and Medical Microbiology (3 cr.) or MICR J510 Infectious Microbes and Host Interaction (3 cr.)
- MICR J805 Molecular Immunology (3 cr.)
- D510 General Microbiology, Infectious Diseases, & Antimicrobial Therapy (3 cr.)
- G959 Graduate Oral Microbiology (3 cr.)
- BIOL 561 Immunology (3 cr.)

Molecular Biology Choose one.

- G865 Fundamental Molecular Biology (3 cr.)
- BIOL 507 Principles of Molecular Biology (3 cr.)
- D512 Molecular Cell Biology (3 cr.)

General Graduate Choose one course in each bullet point.

- B561 Introduction to Biostatistics I (3 cr.) or B551 Biostatistics for Public Health I (3 cr.)
- G504 Introduction to Research Ethics (3 cr.) or G505 Responsible Conduct for Research (1 cr.) or D505 Principles of Ethics and Behavioral Science (1.5 cr., can only be used if graded) or G506 Responsible Conduct for Research (1cr., replaces G504)
- GRAD G655 Research Communications Seminar (2 cr.) or COMM C535 Using Electronic Media (1 cr.)
- J500 Instruction in the Context of Curriculum (Educ. 3 cr.) or PSY608 Measurement Theory and Data Interpretation (Psy 3 cr.) or W531 Technology for Teaching and Learning (Educ 3 cr.) or an alternative 3 cr. graduate level course in educational methods approved by the Program Director
- DENT R956 Current Topics in Oral Biology (4 cr.)

DentalChoose one course in each bullet point.

- DENT R957 Introduction to Research in Oral Biology (3 cr., taken once)
- DENT R958 Research: Oral Biology (1-12 cr. each semester until total course credits for didactic, research and minor courses reaches 90 credits)
- DENT R959 Seminar: Oral Biology and
- One IU Indianapolis graduate level seminar course outside of the School of Dentistry (one semester seminar course each year; 1 cr. each)
- DENT R956 Current Topics in Oral Biology (4 cr.)

Research (remainder of 90 credits)

- DENT R957 Introduction to Research in Oral Biology (3 cr.; taken once)

- DENT R958 Research: Oral Biology (1-12 cr. each semester)

Information about courses offered by schools and departments other than the School of Dentistry are available at the following links:

IU Graduate School Indianapolis

IU School of Medicine Department of Biochemistry & Molecular Biology

IU Indianapolis School of Science Department of Psychology

IU Indianapolis Richard M. Fairbanks School of Public Health

IU Indianapolis School of Education

Updated April 2025

Preventive Dentistry Core Curriculum

Required Courses All courses listed below are required plus 12 minor credits.

Preventive Dentistry Choose one course in every bullet point.

- DENT R909 Advanced Preventive Dentistry I (3 cr.)
- DENT R910 Advanced Preventive Dentistry II (3 cr.)
- DENT R911 Advanced Preventive Dentistry III (1-2 cr.)
- J822 General & Medical Microbiology (3 cr.) or J510 Infectious Microbes & Host Interactions (3 cr.) or J805 Molecular Immunology (3 cr.) or D510 General Microbiology, Infectious Diseases, & Antimicrobial Therapy (3 cr.) or BIOL 56100 immunology or G959 Graduate Oral Microbiology (3 cr.)
- G974 Advanced Nutrition (2 cr.)
- R956 Current Topics in Oral Biology (4 cr.)
- G935 Dental Pediatrics (2 cr.)

Courses from the following list can be used to complete the total hours required for the major subject:

- DENT G905 Bone Physiology, Imaging, and Implant Anchorage (2 cr.)
- DENT G911 Dental Materials Science and Engineering (3 cr.)
- DENT G967 Advanced Periodontics (4 cr.)

General Graduate Choose one course in each bullet point.

- GRAD G504 Introduction to Research Ethics (3 cr.) or G505 Responsible Conduct for Research (1 cr.) or G506 Responsible Conduct for Research (1cr., replaces G504) or D505 Principles of Ethics and Behavioral Science (1.5 cr., can only be used for D.D.S./Ph.D. degree if graded)
- PBHL B561 Introduction to Biostatistics I (3 cr.) or B551 Biostatistics for Public Health I (3 cr.)
- J500 Instruction in the Context of Curriculum (Educ. 3 cr.) or PSY608 Measurement Theory and Data Interpretation (Psy 3 cr.) or W531 Technology for Teaching and Learning (Educ 3 cr.) or an alternative 3 cr. graduate level course in educational methods approved by the Program Director

DentalChoose one per academic year.

- DENT G910 Seminar: Preventive Dentistry or DENT G910 Seminar: Dental Materials or
- DENT R959 Seminar: Oral Biology and
- One IU Indianapolis graduate level seminar course outside of the School of Dentistry (one semester seminar course each year; 1 cr. each)

Required Dental Sciences Courses for Non–Dental Preventive Dentistry Track Applicants
Applicants without a dental degree may apply for the Preventive Dentistry Track but are required to take the following course in the first two years of their program:

- DENT G935 Dental Pediatrics (2 cr.)

Research (remainder of 90 credits)

- DENT R957 Introduction to Research in Oral Biology (3 cr.; taken once in first year)
- DENT G930 Research: Preventive Dentistry (1-12 until total course credits for didactic, research and minor courses reaches 90 credits)

Information about courses offered by schools and departments other than the School of Dentistry are available at the following links:

IU Graduate School Indianapolis

IU Indianapolis School of Science Department of Psychology

IU Indianapolis School of Education

Updated April 2025

Dental Materials Core Curriculum

Required Courses All courses listed below are required plus 12 minor credits.

Biochemistry-Microbiology Choose one course in each bullet point.

- J822 General & Medical Microbiology (3 cr.) or J510 Infectious Microbes & Host Interactions (3 cr.) or J805 Molecular Immunology (3 cr.) or D510 General Microbiology, Infectious Diseases, & Antimicrobial Therapy (3 cr.) or BIOL 561 Immunology (3 cr.) or G959 Graduate Oral Microbiology (3 cr.) or B500 Introduction to Biochemistry (3 cr.) or G974 Advanced Nutrition (2 cr.)
- G911 Dental Materials Science and Engineering (3 cr.)
- G912 Properties and Test Methods: Dental Materials (3 cr.)
- G913 Clinical Applications of Dental Materials (3 cr.)
- R956 Current Topics in Oral Biology (4 cr.)

Additional Courses Additional courses may be recommended by the committee.

- G905 Physiology and Pathology of Bone (3 cr.)
- G967 Advanced Periodontics (4 cr.)
- BCHM 500 Introduction to Biochemistry (3 cr.)
- DENT-G 959 Graduate Oral and Microbiology (3 cr.)

- R909 Advanced Preventive Dentistry I (3 cr.) or R910 Advanced Preventive Dentistry II (3 cr.) or R911Advanced Preventive Dentistry III (2 cr.)

General Graduate Choose one course in each bullet point.

- PBHL G651 Introduction to Biostatistics (3 cr.)
- G865 Fundamental Molecular Biology (3 cr.)
- B561 Introduction to Biostatistics I (3 cr.) or B551 Biostatistics for Public Health I (3 cr.)
- G504 Introduction to Research Ethics (3 cr.) or G505 Responsible Conduct for Research (1 cr.) or D505 Principles of Ethics and Behavioral Science (1.5 cr., can only be used if graded) or G506 Responsible Conduct for Research (1cr., replaces G504)
- PATH G655 Research communications Seminar (2 cr.) or COMM-C 535 Advanced Science Research Communication (1 cr.) plus COMM-C 535 Using Electronic Media (1 cr.)
- J500 Instruction in the Context of Curriculum (Educ. 3 cr.) or PSY608 Measurement Theory and Data Interpretation (Psy 3 cr.) or W531 Technology for Teaching and Learning (Educ 3 cr.) or an alternative 3 cr. graduate level course in educational methods approved by the Program Director

Dental Materials Choose one course in each bullet point.

- DENT G911 Dental Materials Science and Engineering (3 cr.)
- DENT G912 Properties and Test Methods: Dental Materials (3 cr.)
- DENT G913 Clinical Applications of Dental Materials (3 cr.)
- DENT G910 Seminar: Dental Materials (1 cr. each year enrolled)
- One IU Indianapolis graduate level seminar course outside of the School of Dentistry (one semester seminar course each year, 1 cr. each)
- DENT-G 956 Current Topics in Oral Biology (4 cr.)

DentalChoose one each academic year.

- DENT G910 Seminar: Preventive Dentistry or DENT G910 Seminar: Dental Materials
- DENT R959 Seminar: Oral Biology and
- One IU Indianapolis graduate level seminar course outside of the School of Dentistry (one semester seminar course each year; 1 cr. each)

Research (remainder of 90 credits)

- DENT R957 Introduction to Research in Oral Biology (3 cr.; taken once in first year)
- DENT R958 Research: Oral Biology (1-12 cr. each semester)

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Course Descriptions

The availability of specific course offerings varies from year to year.

DENT G905 Bone Physiology, Imaging, and Implant Anchorage (1-3 cr.) Histology, physiology, pathology of bone with reference to maxilla and mandible; development, growth, maintenance, and functional adaptation of bone; bone in pathologic states such as developmental disturbances, inflammatory disturbances, disturbances of metabolism, and tumors.

DENT G907 Clinical Oral Pathology Conference I (.5; 1 maximum cr.) Presentation of cases of diagnostic problems; student prepares several cases for presentation.

DENT G909 Clinical Oral Pathology Conference II (1 cr.) Differential diagnosis of oral and maxillofacial pathology. Emphasis on etiology, pathogenesis, and therapeutics.

DENT G910 Seminar (1 cr.)

DENT G911 Dental Materials Science and Engineering (2-3 cr.) Composition, chemical reactions, physical properties, and clinical significance of metals, resins, and other materials used in dentistry; phases of metallography, physical chemistry, and physics pertinent to this field. Laboratory experience in specimen preparation, use of metallograph and scanning electron microscope.

DENT G912 Properties and Test Methods: Dental Materials (2-3 cr.) Discussion of the basic physical, mechanical, and chemical properties with emphasis on the relationship to dental materials. Methods applicable to testing dental materials for these properties will be discussed along with ADA and ANSI specifications. Laboratory demonstrations of instruments.

DENT G913 Clinical Applications of Dental Materials (2-3 cr.) P: G912. This is a seminar course in which the clinical behavior and manipulation of dental materials as related to basic physical and chemical properties of the materials are discussed. Specific clinical problems are defined and knowledge of basic properties applied to explain the behavior and/or solve the problem.

DENT G914 Advanced Complete Denture Theory (1-3 cr.) Advanced theories of complete denture prosthodontics, including comparison of denture materials and prosthetic teeth.

DENT G916 Special Problems in Complete Denture Design (1-4 cr.) Treatment of patients with difficult and unusual prosthetic denture problems.

DENT G917 Maxillofacial Prosthetics (1-6 cr.) Lectures on the prosthetic rehabilitation of individuals with congenital, acquired, or developmental intraoral and extraoral defects; hospital routine and multidisciplined approach to treatment.

DENT G928 Research: Periodontics (arr. cr.)

DENT G921 Research: Dental Materials (arr. cr.)

DENT G930 Research: Preventive Dentistry (arr. cr.)

DENT G923 Research: Prosthodontics (arr. cr.)

DENT G925 Research: Operative Dentistry (arr. cr.)

DENT G926 Research: Endodontics (arr. cr.)

DENT G927 Research: Orthodontics (arr. cr.)

DENT G931 Advanced Pediatric Dentistry (1-3 cr.) Two-semester course; diagnostic, preventive, and therapeutic phases of pediatric dentistry; evaluation of the literature.

DENT G934 Advanced Clinical Pediatric Dentistry (1-6 cr.) Advanced, diagnostic, corrective, and preventive procedures in pediatric dentistry; instruction and clinical experience in restorative dentistry, dental caries control, pulp therapy, periodontics, hereditary and congenital dental anomalies, oral medicine, behavior management, sedation, managing patients with various medically or physically disabling conditions, managing oral trauma, and interceptive orthodontic procedures.

DENT G935 Dental Pediatrics (1-2 cr.) Medical and dental problems of the chronically ill or handicapped child; lectures, discussions, and ward rounds cover physical diagnosis, and normal and abnormal physical and emotional growth of the child.

DENT G936 Advanced Pediatric Dentistry Techniques (1-3 cr.) Interceptive orthodontic appliance design and fabrication.

DENT G937 Advanced Clinical Instruction in Removable Partial Prosthodontics (.5-6 cr.) Clinical experience in extracoronally and intracoronally retained removable partial dentures.

DENT G938 Advanced Removable Partial Prosthodontics Technique (.5-6 cr.) Tooth preparation for and fabrication of abutment restorations for extracoronally and intracoronally retained removable partial dentures, and fabrication of the prostheses.

DENT G941 Advanced Fixed Partial Prosthodontics Technique (.5-4 cr.) Tooth preparation for and fabrication of extracoronal restorations and fixed prostheses, including partial-veneer gold crowns, full-veneer cast crowns, pin-ledge retainers, metal-ceramic crowns, all-ceramic crowns, metal-ceramic pontics, and sanitary pontics.

DENT G942 Theories of Occlusion (1-2 cr.) Review of the literature, philosophies, and techniques of major contributors to the development of modern gnathological concepts.

DENT G944 The Principles of Gnathology (1-2 cr.) Lectures, laboratory, and clinical exercises demonstrating the application of gnathological principles to restorative dentistry.

DENT G945 Pediatric Dentistry Seminar (1 cr.) Current literature, research design, case analysis, and diagnosis.

DENT G947 Cephalometrics (1-4 cr.) Technique of procuring films of living individuals; tracing of important facial landmarks and planes; taking of significant angular and linear readings, and transposing same to a graph.

DENT G948 Advanced Radiology (2 cr.) Applications in X-ray production, intraoral and extraoral techniques, film processing, radiographic interpretation, radiation hygiene.

DENT G950 Advanced Clinical Operative Dentistry (1-6 cr.) Comprehensive restorative care correlated with modern preventive dentistry principles; current concepts of operative dentistry.

DENT G951 Interdisciplinary Role of Operative Dentistry (2 cr.) The interrelationship of operative procedures with other areas of dental and general health care delivery.

DENT G952 Analysis of Operative Procedures (2 cr.) Restorative techniques and physical properties of dental materials correlated to properties of tooth structure; pulp protection and permanency of restorations.

DENT G953 Recent Advances in Operative Dentistry (2 cr.) Current concepts dictated by research; correlation of reports on the literature.

DENT G956 Advanced Endodontics (1-8 cr.) Classroom instruction and clinical experience in developing proficiency in complicated endodontic cases.

DENT G957 Analysis of Endodontic Theory (1-4 cr.) Library research and review of literature supporting principles and practice of endodontics.

DENT G958 Biomechanics (1-4 cr.) Principles of force application used in altering dento-facial relationship; appliance design, fabrication, and activation; specific treatment procedures discussed and applied on the typodont.

DENT G959 Oral Microbiology (3 cr.) P: Basic microbiology. Role of oral microorganisms in health and disease states of the host. Emphasis is placed on the biological mechanisms involved in dental caries, periodontal disease, and specific microbial infections of the oral cavity.

DENT G960 Advanced Orthodontic Clinic (1-6 cr.) Details of treatment plan based on careful analysis; timing phenomena; reanalysis of treatment; cleft palate, surgical correction, temporomandibular syndrome.

DENT G963 Advanced Orthodontic Techniques (2 cr.) Details of wrought and cast appliances used in treatment of malocclusions.

DENT G964 Dento-Facial Analysis (2 cr.) P: G947. Methods of determining and evaluating deviation from normal dental, skeletal, muscular, and integumental patterns; treatment objectives with respect to stability, esthetics, and function.

DENT G966 Advanced Clinical Periodontics (1-4 cr.) Evaluation and treatment of special advanced cases involving diseases of soft tissue and bony support structures.

DENT G967 Advanced Periodontics (1-4 cr.) Periodontal diseases relating to etiology, symptomatology, treatment, and differential diagnosis.

DENT G976 Advanced Oral Pathology I (1-2 cr.) All phases of disease of the oral cavity and adjacent structures; oral manifestations of systemic disease; disturbances of growth and development, infections, and neoplasms; microscopic study of tissue sections.

DENT G977 Advanced Oral Pathology II (2 cr.) All phases of disease of the oral cavity and adjacent structures; oral manifestations of systemic disease; disturbances of growth and development, infections, and neoplasms; microscopic study of tissue sections.

DENT G980 Advanced Surgical Endodontics (1-6 cr.) P: G956 and G957. Classroom instruction in principles and clinical experience in advanced surgical endodontics.

DENT R901 Oral Surgery Literature Seminar (.5 cr.) Seminar review of classic and current literature in the field of oral and maxillofacial surgery.

DENT R905 Advanced Oral Surgery (1-3 cr.) Major and minor advanced oral surgical procedures, treatment planning, and variable approaches to similar problems; development of surgical judgment. (Enrollment limited to oral and maxillofacial surgery residents, except by special permission.)

DENT R909 Advanced Preventive Dentistry I (2-3 cr.) Basic concepts, principles, and techniques relative to the etiology and prevention of oral diseases. Analysis of the components of the oral environment, attacking agents, defense mechanisms, and preventive measures.

DENT R910 Advanced Preventive Dentistry II (2-3 cr.) Basic concepts, principles, and techniques relative to the etiology and prevention of oral diseases. Analysis of the components of the oral environment, attacking agents, defense mechanisms, and preventive measures.

DENT R911 Advanced Preventive Dentistry III (1-2 cr.) Basic concepts, principles, and techniques relative to the etiology and prevention of oral diseases. Analysis of the components of the oral environment, attacking agents, defense mechanisms, and preventive measures.

DENT R921 Maxillofacial Prosthetics Clinic (.5-6 cr.) Introduction to the clinical management of individuals with congenital, acquired, or developmental intraoral and extraoral defects, with hospital experiences and a multidisciplined approach.

DENT R922 Advanced Maxillofacial Prosthetics Clinic (1-6 cr.) Advanced clinical practice in the treatment of individuals with congenital, acquired, or developmental intraoral and extraoral defects, with hospital experiences and a multidisciplined approach.

DENT R923 Maxillofacial Prosthetics Seminar (.5-2 cr.) Review of fundamentals, multidisciplined topics, current literature, and case presentation.

DENT R924 Retention and Post-Retention Analysis (2 cr.) Problems of retention in orthodontically treated patients; appliances and procedures for prevention and control of relapses; retrospective analysis of long-term post-retention records to assess the results of different approaches to treatment.

DENT R925 Special Topics in Dentistry (1-14 cr.) Attendance at lectures, seminars, and special clinics designed to update students' knowledge in clinical and basic science disciplines.

DENT R928 Advanced Maxillofacial Prosthetic Technique (.5-1 cr.) Design and fabrication of obturators for partial maxillectomy patients, both edentulous and dentulous. Introduction to the fabrication of extraoral prostheses.

DENT R929 Advanced Complete Denture Technique (.5-1 cr.) Dental laboratory procedures for the fabrication of complete and immediate dentures, including setting and equilibrating denture teeth.

DENT R930 Prosthodontic Literature Review (.5-1 cr.) Discussion of assigned topics from classic and current prosthodontic and related literature, led by students and moderated by faculty member in charge.

DENT R931 Advanced Fixed Partial Prosthodontics Seminar and Laboratory I (.5-2 cr.) Advanced clinical and laboratory procedures with emphasis on metal-ceramic restorations.

DENT R933 Clinical Prosthodontics Seminar (.5-2 cr.) Advanced clinical procedures pertinent to the practice of prosthodontics.

DENT R934 Surgical Orthodontics Seminar I (1 cr.) Theoretical basis for diagnosis and treatment planning of cases involving both orthodontics and surgery.

DENT R935 Surgical Orthodontics Seminar II (1 cr.) Continuation of Surgical Orthodontics Seminar I; theoretical basis for diagnosis and treatment planning of cases involving both orthodontics and surgery; student prepares cases for presentation.

DENT R936 Advanced Fixed Partial Prosthodontics Seminar and Laboratory II (.5-2 cr.) Advanced clinical and laboratory procedures with emphasis on all-ceramic restorations.

DENT R940 Fundamentals of Implant Dentistry I (1-3 cr.) Two-semester course presenting oral implants as an alternative for removable prostheses. The lecture and class participation course offers biological sciences relating to implantology with emphases on biomaterials, physiology of bone, soft tissue, and wound healing relating to various implants. Includes a review of pathology affecting implant therapy success.

DENT R941 Fundamentals of Implant Dentistry II (1-3 cr.) An overview of available implant systems with clinical application including patient selection, diagnosis and treatment planning, implant placement, interim prosthetic management, and definitive restorative procedures. This lecture/clinical course is in conjunction with G915, G937, and G940 (clinics) and will provide hands-on experiences in clinical and laboratory procedures.

DENT R942 Management of Temporomandibular Disorders and Occlusion (2 cr.) This course, a weekly two-hour seminar, will give the student a better perspective on the diagnosis and management of temporomandibular disorders. Host speakers will lecture on the perspective of their **specialty (e.g., neurology, radiology, psychology, psychiatry, rheumatology, orthopedics, physical medicine, physical therapy). Literature reviews will be prepared by participating students.**

DENT R943 Management of Temporomandibular Disorders and Occlusion--Clinic (1-3 cr.) P: R942. Weekly three-hour clinical session for clinical management of the TMJ patient with (1) pain of muscular origin; (2) internal derangement; (3) problems associated with inflammation, chronic hypomobility, hypermobility, and deformity.

DENT R944 Graduate Craniofacial Growth and Development I (2-3 cr.) Growth and development of the craniofacial complex are presented in descriptive and theoretical terms as they relate to occlusion and orthodontics.

DENT R946 Prosthodontic Patient Presentation (.5-2 cr.) Case presentations and discussion of alternative methods of rehabilitation.

DENT R947 Orthodontics for the Mixed Dentition (1 cr.) A course designed to familiarize the student with early interceptive orthodontic treatment in the mixed dentition and early first phase of comprehensive orthodontic treatment.

DENT R948 Private Practice of Prosthodontics (.5-3 cr.) This seminar will provide guidance and resource materials that would be useful in establishing and promoting a prosthodontic practice. The diversity and similarity of prosthodontic practices will be illustrated. Field trip visits to several prosthodontic offices will be available. An effort will be made to establish a network for continuing support and exchange of ideas.

DENT R949 Advanced Head and Neck Anatomy (3 cr.) P: Previous course in gross anatomy of the head and neck. This course presents an advanced approach to cranial anatomy with special reference to those regions of particular importance to clinical dentistry. Lectures are supplemented with a human cadaver dissection.

DENT R951 Advanced Minimal and Moderate Sedation (2 cr.) Prepares students in the use of intravenous light sedation as an adjunct to a comprehensive management program for patients in the private practice setting. DENT

R955 Graduate Oral Biology I (2.5 cr.) Basic survey of oral biology, including cell biology; composition of the oral hard tissues; role of saliva in health and disease; systemic and oral microbial diseases important in dentistry; immunology; prevention of oral diseases; nutrition; and infection control.

DENT R956 Current Topics in Oral Biology (4 cr.) P: B500 and G865 or equivalents. Purpose is to familiarize students with current areas of research in oral biology through a combination of lectures and literature discussions on topics covered in review articles and original research papers appearing in journals devoted to various aspects of oral biology.

DENT R957 Introduction to Research (3 cr.) P: Consent of instructor. Laboratory research instruction in oral biology. Purpose is to introduce students to three different research programs in the field of oral biology.

DENT R958 Research: Oral Biology (1-12 cr.) P: Consent of instructor. Data obtained in this course may be used to meet the dissertation requirements for the Ph.D.

DENT R959 Seminar: Oral Biology (1 cr.) P: Consent of instructor. Current topics in all fields of oral biology. Discussion and review of current literature in oral biology. Topics vary from year to year. May be repeated for credit.

DENT R961 Recent Advances in Periodontics (.5-2 cr.) Discussion of current concepts and recent advances reported in the periodontal literature with emphasis on evidence-based practice. The seminar is led by students and moderated by selected faculty.

DENT R962 Advanced Periodontal Treatment Planning Seminar (.5-2 cr.) Selected cases requiring periodontal and/or implant therapy will be presented by students. Various treatment options will be discussed for the particular case. Any completed therapy will be presented with a discussion and evaluation of the results.

DENT R963 Dental Implantology (1 cr.) Study of basic and clinical sciences related to dental implantology.

DENT R964 Pharmacology and Therapeutics for Graduate Dental Students (2 cr.) This course is a review of the major drug classes that the dental graduate student will encounter in the clinic. Discussion of how the drugs the patient takes impact the practice of dentistry will be included.

DENT R965 Advanced Clinical Prosthodontics (.5-6 cr.) Clinical practice of prosthodontics involving complete dentures, removable partial dentures, fixed partial dentures, and/or dental implant-supported prostheses.

DENT R978 Introduction to Health Information Technology in Dentistry (3 cr.) This course examines the role of health information technology in dentistry to improve patient care and outcomes. Students assess the dental team's workflow, relate it to system requirements, evaluate and select clinical information systems, and manage their implementation. Students research implementation challenges and create a strategic plan to address them.

DENT R980 Research Methodology (1 cr.) Graduate students will learn basic research methodology to prepare them for required research project as part of their graduation requirements. A fundamental overview of some of the concepts and principles related to the initiation and conduct of laboratory, animal and clinical research.

DENT R985 Advanced Esthetic Dentistry (2 cr.) The purpose of this course to provide Graduate Cariology and Operative Dentistry Students the opportunity to further develop esthetic restorative skills and improve predictability of esthetic treatment outcomes using direct and indirect restorative materials. The course will be comprised of lectures presented by faculty and invited expert lecturers, as well as laboratory activities related to evidence-based practice. The seminar is led by students and moderated by selected faculty.

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