Dentistry (DDS or DMD)

Career Description

- Dentists are devoted to maintaining oral health as well as a patient’s overall health.
- In their practices, dentists
  - Help patients maintain oral health.
  - Use diagnostic ability and manual skills.
  - Treat and work with people from all age groups requiring good communication skills.
  - Examine the head, neck, and oral cavity.
  - Diagnose conditions using advanced technologies including radiography and computer generated imaging.
  - Restore and replace teeth damaged from decay, trauma or disease.
  - Help patients to improve chewing, speech, digestion of food, sleep patterns and appearance.

- Specialties are available within dentistry with further training following dental school including:
  - Endodontics (nerves), Oral Surgery, Orthodontics, Prosthodontics (appliances), Public Health and others.

Becoming a Dentist

- Complete a bachelor’s degree in any major along with prerequisite courses.
- Attend a 4 year professional dental school program following your undergraduate degree.
- Obtain a DDS (Doctor of Dental Surgery) or a DMD (Doctor of Medical Dentistry) degree, these are equivalent.
- Upon completion of dental school, pass a licensing examination.

Preparation

- Observe a general dentist to make sure this is the right field for you and you truly understand what it means to be a dentist. Plan on at least 100 hours of observation time, but more hours are required at some schools.
- Adopting a hobby or skill that develops and illustrates manual dexterity is recommended.
- Students need to take the Dental Aptitude Test (DAT) to apply to dental school. The DAT is a standardized online exam taken about 15 months before beginning dental school (generally in the spring/summer following the junior year of college).
- Dental programs may differ slightly in their requirements. Many schools recommend courses such as art, business management, accounting, statistics, interpersonal communications, Spanish, cell biology, genetics, histology, microbiology, and molecular biology.
- Many schools require all prerequisite courses have at least a grade of C.

Common Prerequisite Courses (pre-reqs determined by each dental school but similar to this list)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Course</th>
<th>Purdue Equivalents (specific courses may vary by major)</th>
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<tbody>
<tr>
<td>Biology-Need 20 credit hours for IU including general, A&amp;P, micro</td>
<td>General Biology</td>
<td>BIOL 11000-11100 or BIOL 13100 &amp; BIOL 23100 &amp; 23200 (lab) or BIOL 23000 &amp; upper level biology course plus lab</td>
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<td>Anatomy &amp; Physiology</td>
<td>BIOL 20300-20400 or BIOL 30100-30200</td>
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<td>Microbiology</td>
<td>BIOL 22100 or BIOL 43800</td>
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<td>Chemistry-Need 12 credit hours for IU</td>
<td>Inorganic with lab</td>
<td>CHM 11500-11600 or CHM 12500-12600 or CHM 12300-12400 or CHM 12901 (CHM 11500 credit exam recommended along with CHM 12901)</td>
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<td>Organic with lab</td>
<td>CHM 25500-25600 or CHM 26100-26200 or CHM 26505-26605 or MCMP 20400-20500</td>
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<td>Biochemistry</td>
<td>BCHM 30700 or BCHM 56100 or CHM 33300 or CHM 33900 or CHM 53300 or MCMP 20800</td>
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<tr>
<td>Physics-8 hrs for IU</td>
<td>General</td>
<td>PHYS 22000-22100 or 23300-23400 or PHYS 21800-21900 or PHYS 17200 &amp; 27200 or PHYS 17200 &amp; 24100 (plus additional 1 hour lab such as PHYS 25200)</td>
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<tr>
<td>Social Science-3 hrs for IU</td>
<td>Psychology, Anthropology, Sociology, Communications</td>
<td>PSY 12000, ANTH 10000, SOC 10000, COM 11400</td>
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<tr>
<td>Humanities-3 hrs for IU</td>
<td>English Composition</td>
<td>ENGL 10600 or 10800 (some schools require 2 semesters of English)</td>
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<tr>
<td>Other</td>
<td>Art</td>
<td>A course in jewelry making, sculpture, or ceramics is recommended</td>
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<tr>
<td>Pre-Med Planning Seminar (optional)</td>
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<td>BIOL 39600-0 credit 10 week class covering how to apply to dental school and other health professions programs</td>
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Student Organization: Pre-Dental Club

Research Programs
- Requirements for dental programs and additional information about schools and admissions statistics can be found in the ADEA Official Guide to Dental Schools that is released every other year. It may be purchased through the ADEA website as a print book or as a digital release. http://www.adea.org/officialguide/

Applying
- The initial application to most dental programs is through an online common application called the American Association of Dental Schools Application Service (AADSAS) https://aadsas.liaisoncas.com/applicant-ux/#/login.
- Some of the individual dental programs ask for supplementary information beyond what is included in your online application and then invite select students to interview.
- Competitive applicants will have:
  - Strong academic performance including a GPA of 3.5 or higher
  - High scores on the DAT – generally 18 or better in each section
  - Leadership, teamwork, and communication skills
  - Undergraduate research experience
  - Volunteer and shadowing/observation experiences
  - Strong positive letters of recommendation (mostly from faculty and dentists)
- Early application is essential – generally by early July.

Fee Assistance
- AADSAS Fee Assistance Program http://www.adea.org/GoDental/Application_Preparation/The_Application_to_Dental_School_ADEA_AADSAS/Fee_Assistance_Program.aspx
- Partial Fee Waiver for the DAT http://www.ada.org/~/media/ADA/Education%20and%20Careers/Fees/dat_fee_waiver.ashx

Employment Outlook
- According to the Bureau of Labor Statistics, the job outlook for dentists is excellent with an expected 19% growth through 2026.
- The median salary in 2017 was $158,120.
- Many dentists have their own practice or work as part of a small practice so they often enjoy greater flexibility in their work schedules. Entrepreneurial and business skills are valuable.
- Full time dentists spend approximately 36 hours per week in their practices.

Programs in the Region
- Indiana University Indianapolis, IN https://www.dentistry.iu.edu/
- University of Louisville Louisville, KY http://louisville.edu/dentistry/
- Midwestern University Downers Grove, IL https://www.midwestern.edu/programs_and_admission/il_dental_medicine.html

More Information
- American Dental Education Association (includes AADSAS) http://www.adea.org
- American Dental Association (includes DAT) https://www.ada.org/en

Other Careers to Consider
- Dental Hygiene
- Optometry