Pre-Dentistry Guide
2020-2021

Dentists diagnose and treat problems with a patient’s teeth, gums, and related parts of the mouth. They provide advice and instruction on taking care of teeth and gums and on diet choices that affect oral health. Dentists typically remove decay from teeth and fill cavities, repair cracked or fractured teeth and remove teeth, straighten teeth to correct bite issues, place sealants or whitening agents on teeth, give anesthetics to keep patients from feeling pain during procedures, write prescriptions for antibiotics or other medications, examine x rays of teeth, gums, the jaw, and nearby areas for problems, make models and measurements for dental appliances, such as dentures, to fit patients, teach patients about diet, flossing, use of fluoride, and other aspects of dental care. Dentists use a variety of equipment, including x-ray machines, drills, mouth mirrors, probes, forceps, brushes, and scalpels. They also use lasers, digital scanners, and other computer technologies. Dentists in private practice also oversee a variety of administrative tasks, including bookkeeping and buying equipment and supplies. They employ and supervise dental hygienists, dental assistants, dental laboratory technicians, and receptionists. (From the online Occupational Outlook Handbook)

A degree in Dentistry is a four-year professional degree. Students attend dental school after they have completed an undergraduate degree or a minimum of 90 semester hours toward a degree. Occasionally, those who enter after three years complete an undergraduate degree by applying their first year of dental school work as 30 s.h. of elective credit toward an undergraduate degree.

Sample Pre-Dentistry Four-Year Academic Plans

Plan A: Starting with General Chemistry and Trigonometry or Pre-Calculus*

Year 1:
CHEM:1070 General Chemistry I
Math through Trig. or Pre-Calculus*

CHEM:1110 Principles of Chemistry I
MATH:1460 Calc. for Bio. Sciences if desired or needed for major.**

Year 2:
CHEM:1120 Principle of Chemistry II
BIOL:1411 Foundations of Biology

CHEM:2210 Organic Chemistry I
BIOL:1412 Diversity of Form and Function

Year 3:
CHEM:2220 Organic Chem. II
BIOC3110 Biochemistry
Advanced Biology course if desired

CHEM:2410 Organic Chem.Lab
PHYSiology or anatomy if desired
Take DAT in winter or spring***
Apply to dental school

Year 4:
PHYS:1511 College Physics I
PHYS:1512 College Physics II
Physiology or anatomy course if desired

Revised August 2020 Crosby
Plan B: Starting with Principles of Chemistry and Calculus*

Year 1:
- CHEM:1110 Principles of Chemistry I
- MATH:1460 Calc. for Bio. Sciences
  if desired or needed for major*

CHEM:1120 Principles of Chemistry II
BIOL:1411 Foundations of Biology I

Year 2:
- CHEM:2210 Organic Chemistry I
- BIOL:1412 Diversity of Form Function

CHEM:2220 Organic Chemistry II
CHEM:2410 Organic Chemistry Lab

Year 3:***
- Advanced biology course if desired
- BIOC:3110 Biochemistry

Anatomy or physiology if desired
Take DAT winter or spring**
Summer: Apply to dental school

Year 4:
- PHYS:1511 College Physics I
- PHYS:1512 College Physics II

*The UI College of Dentistry requirements are 16sh of coursework in Chemistry, 8sh of which must be Organic Chemistry courses; 8sh of Biology courses with lab, 8sh of Physics with lab.

**While the UI College of Dentistry has no formal math requirement, it strongly recommends a semester of calculus. Minimally, math through trigonometry is needed for College Physics I-II.

***The DAT may be taken as early as after the completion of two to three weeks of Organic Chemistry II. It is recommended that you schedule after completing the entire Organic sequence. Physics is not included in the DAT.

Academic Guidelines
An overall GPA of 3.5 or above (on a 4.0 scale) is the preferred GPA for consideration for admission at the UI College of Dentistry. The average GPA for the fall 2020 class was 3.67. The science GPA average was 3.69; this GPA includes grades in biology, chemistry, physics, math, statistics and computer science courses.

UI College of Dentistry Admissions Profile 2020:
- 871 applicants
- 82 enrolled
- GPA Averages: Cum 3.71, Science 3.63
- 97 residents
- 55 residents
- DAT Averages: 21 Academic
- 767 nonresidents
- 27 nonresidents
- 21.7 Perceptual Ability

Pre-Professional Development
Visit the College of Dentistry: Any student who wants to assess dentistry as a potential career is encouraged to visit the UI clinics. Contact Rachael Kowbel at the Office of Admissions, N311 DSB, 335-7157, to make arrangements; dress professionally.

University of Iowa Pre-Dental Club
This is an active campus group that provides dental activities, information on the application process, and leadership opportunities. The club meets once a month, has an active listserv, and a club newsletter. For more information, contact Rachael Kowbel, rachael-kowbel@uiowa.edu.
Website: https://www.dentistry.uiowa.edu/education-predental-club
Facebook: https://www.facebook.com/groups/
Undergraduate Research: Students wanting to do dental research are encouraged to visit the clinics first and to express interest while making the visit. Credit for research can be arranged through Science Education (course number SIED:4115 Directed Study) or for honors students through the Blank Honors Center (HONR:3200 Honors Research Practicum).

Shadowing/Volunteering: While there is no formula for hours spent volunteering, working, or shadowing in a dentistry clinic, any exploration of the field helps students make more informed decisions regarding their suitability for a career in dentistry. The University of Iowa College of Dentistry does not have a minimum shadowing requirement. They want to see evidence of diverse shadowing experiences. The more practitioners you can observe, the more exposure you will have to a variety of philosophies on running a business, patient interaction, specialty arenas, etc. Community service is encouraged.

Diversity in Dentistry
ADEA has stated that the number of graduates of dental and allied dental programs should reflect their representation in the population and the communities in which they will serve, and that recruitment, retention and graduation of practitioners from disadvantaged groups are goals that are important for the public’s health (from the ADEA website).

The University of Iowa College of Dentistry participates in a summer enrichment program, Summer Health Professions Education Program (SHPEP), https://medicine.uiowa.edu/shpep/. This program focuses on improving access to information and resources for college students interested in the health professions. SHPEP’s goal is to strengthen the academic proficiency and career development of students underrepresented in the health professions. Students who complete the SHPEP program are guaranteed an interview at the College of Dentistry.

Citizenship/International Students
Dental schools vary as to whether they accept non-U.S. citizens. Some schools that do accept non-citizens, including the UI College of Dentistry, require a substantial financial commitment up front. Since not all schools accept non-citizens and since the financial commitment of those that do may be substantial, students should thoroughly research and carefully consider such a decision and discuss it with their pre-dental advisors early in their undergraduate years.

The Application Process
All dental schools use the American Dental Education Association (ADEA) for initiating an application. ADEA sponsors the online Associated American Dental Schools Application Service (AADSAS): www.adea.org. For students applying to the UI College of Dentistry, the deadline for a complete application to arrive at AADSAS is October 1st. However, submitting a complete application by June is highly recommended. Students should check the ADEA Official Guide to Dental Schools for deadlines at other schools and should apply well before listed deadlines.

Entrance Examination Requirement (DAT)
All U.S. dental schools require applicants to take the Dental Admissions Test (DAT). It is preferred that the DAT is taken no later than August of the calendar year preceding the year in which the applicant wishes to enroll in the Dental College. Students register online at www.ada.org. The test consists of four sections: a Survey of Natural Sciences (biology, general chemistry, and organic chemistry), Reading Comprehension, Quantitative Reasoning, and Perceptual Ability. Two summary scores are reported, one on academic subjects and one for perceptual ability, as well as scores on individual sections. The scoring range is from 1 to 30. The average score for students accepted into
the UI program is 20-21 for each subtest. The current national average for admitted applicants is 18-20.

Letters of Evaluation/Recommendation
Letters of evaluation will be required of applicants. Letters from a faculty member, dentist or physician, academic advisor, or employer would be appropriate. Information about the non-academic character of a student would be most useful as academic information is already in the application. Students should have their evaluation letters submitted directly through AADSAS.

Interviews
Most schools screen applicants with some form of personal interview. Please consult with the Pomerantz Career Center for resources and preparation: https://careers.uiowa.edu/students/mock-interviews

Admission
Admission is based on GPA, DAT scores, research interest or experience, community involvement, leadership qualities, the interview, the essay, and letters of recommendation. The Admissions Committee consists of faculty, two dental students, and a private practitioner (all voting members), as well as three ex-officio members.

Criminal Background Checks
A prerequisite for enrollment in the UI College of Dentistry is giving consent for an external background check. This check includes, but is not limited to, past criminal offenses and registry information. If there is evidence of arrest for a crime(s), conviction for a crime(s), presence on an abuse registry, or other information which reasonably suggests that patient safety might be compromised, the student will be asked to provide additional information.

Websites
American Dental Education Association: www.adea.org
American Dental Association: www.ada.org
UI College of Dentistry: www.dentistry.uiowa.edu

Academic Advising Center, 2020-2021