

HEALTH PROFESSIONS OFFICE

DENTISTRY

Dentistry is concerned with the diagnosis, treatment and prevention of problems associated with the hard and soft tissues of the mouth. The dentist examines the teeth, mouth, and associated tissues, diagnoses and treats diseases, restores defective teeth and tissue, and replaces missing teeth. Most dentists practice in an office setting, typically in a solo practice with an average of four employees. With the rapid changes occurring in health delivery it is anticipated that in the future more dentists will affiliate in group practice. There are more than 140,000 active dentists in the U.S. today. Most dental students enter a practice after receiving their professional degree, either a Doctor of Dental Surgery (D.D.S.) or a Doctor of Dental Medicine (D.M.D.) The two degrees are entirely equivalent in terms of the program completed and the rights conferred for practice.

About 85% of the practicing dentists in the U.S. are engaged in a general practice, although there has been a recent increase in the number of specialists. There are eight specialties recognized by the American Dental Association and all of these require additional training after the dental degree. The nine specialties are:

- Orthodontics – the science of tooth and oral structure development; treats problems related to irregular and abnormal dental development.
- Oral surgery – concerned with diseases, injuries, and defects in the jaw and associated structures.
- Endodontics – deals with diseases of the pulp (nerve) and other dental tissues.
- Periodontics – concerned with the diagnosis and treatment of diseases that affect the oral mucous membranes, gum and bone that surround and support the teeth.
- Pediatric dentistry – concerned with the treatment of children, adolescents, and young adults whose dental development is not complete.
- Prosthodontics – the science and art of replacing missing natural teeth with fixed or removable substitutes.
- Oral Pathology – deals with diseases of the mouth. Often provides counsel to other dentists.
- Dental Public Health – treats the community rather than the individual for the purpose of prevention and control of dental diseases.
- Oral Radiology – newest specialty in development by the ADA.

The competition for admission to these specialties is keen, particularly in oral surgery and orthodontics. Only students graduating in (or near) the top ten percent of their dental school class will be competitive for acceptance into these training programs.

There are 56 dental schools in the United States and they have similar requirements for admission. The basic dental school curriculum consists of the study of various health sciences in the first two years, including anatomy, biochemistry, histology, microbiology, pathology, pharmacology and physiology. The final two years are spent learning diagnosis, treatment, planning and the performance of all aspects of clinical dentistry. While the average GPA of students admitted to dental schools is somewhat lower than the average GPA of students admitted to medical schools, the average has been increasing in the past few years.

The American Dental Education Association (ADEA) publishes the Official Guide to Dental Schools each academic year. Please refer to this guide for information regarding Admission Requirements to ALL U.S. and Canadian Dental Schools. There is a copy of this book in the Health Professions Office.

Qualities of a Successful Dental Student

The admissions committee looks for certain qualities in the dental school applicant. A strong academic record and DAT scores are desirable. The student must be highly motivated as evidenced by good grades and volunteer experience. The applicant should have demonstrated qualities of good judgment and perseverance. The admissions committee favors the applicant who has demonstrated a certain degree of manual dexterity. This can be demonstrated through playing a musical instrument, working on needlepoint,

pottery or whatever. It is important that this be stressed on your application. In addition, if you do not enjoy working with your hands, you may find that dentistry is unsatisfactory as a career.

Applying to Schools

Most dental schools participate in the American Association of Dental Schools Application Service (AADSAS). This service allows students to submit a single application and transcript to AADSAS. The service will collect and collate data, compute grade point averages, and transmit standardized applications to the schools to which you apply. The application can be obtained via the web at <http://www.aadea.org>. When you send in your ADSAS application, notify the Career Services to forward your letters of recommendation to the schools to which you are applying. AADSAS does accept letters of recommendation; however, some dental schools do not accept letters of recommendation from AADSAS. It is the student's responsibility to review the Official Guide to Dental Schools for information regarding the submission of letters.

For dental schools that do not participate in AADSAS, obtain the application material directly from the individual schools.

Consult the admission requirement book for information on the out-of-state students accepted at schools outside of your state of residence. Most schools also require an interview. Students considering a career in dentistry are urged to obtain first-hand experience in the field so that they may test their interest and ability. Many opportunities for this volunteer experience exist in the Santa Barbara community as well as at Student Health.

The Dental Admission Test

The Dental Admission Test (DAT) is required for entrance into most schools. You can apply to take it at almost any time. You should plan to take the test after completion of the general chemistry, organic chemistry, and biology (the DAT does not include physics) but at least a year and a half before you plan to enter dental school (in the Spring Quarter of your junior year).

The DAT is designed to measure general academic ability, comprehension of scientific information and perceptual ability. The exam includes sections on Natural Sciences - biology, general chemistry, and organic chemistry; Reading Comprehension (dental and basic sciences); Quantitative Ability (math problems) and Perceptual Ability (two and three dimensional problem solving). The latter test is designed to test motor and space relations abilities. The DAT does not include Physics.

The DAT is usually taken in April, while AADSAS applications are sent out after June 1st.

Course Requirements for Admission

In general, the requirements for admission to enter dental schools are very similar to those for medical school. Please see the following for information regarding California dental schools:

Dental School Requirement	UCSB Course Equivalent
General Chemistry	Chemistry 1A-B-C/1AL-BL-CL or Chem 2 equivalent
Organic Chemistry	Chemistry 109A-B-C and Chemistry 6A-B
General Biology	MCDB 1A/AL, 1B, EEMB2, MCDB 1L or EEMB 2L, EEMB 3/3L **UOP requires 3 additional biology courses
General Physics	Physics 6A-B-C/6AL-BL-CL or Physics 1-2-3-4/3AL-4AL
English	Writing 2, Writing 50 or English 10 (or Writing 109) (Some schools require a full year of English – check the ADEA handbook)
Psychology (UCLA and UCSF)	Psychology 1
Biochemistry (UCLA)	MCDB 108A or 108B or 110 or Chem 142A
Social Sciences, Humanities, and/or Foreign language (UCSF)	minimum of 16 units