



Pre-Dentistry

Advisement

Nature of Work, Earnings and Occupational Outlook

Dentistry is a branch of the healing arts and sciences devoted to maintaining the health of the teeth, gum, and other hard and soft tissues of the oral cavity and adjacent structures. As of 2005, 176,634 dentists were professionally active in the United States. Dentistry requires diagnostic ability and manual skills. Dentists should have good visual memory, excellent judgment of space and shape, a high degree of manual dexterity, and scientific ability. Good business sense, self-discipline, and communication skills are helpful for success in private practice.

Though earnings vary according to number of years in practice, location, hours worked, and specialty, dentists in general practice who owned their practice earned an average net income of \$185,940 in 2004 according to the American Dental Association's 2005 Survey of Dental Practice publication. The report also shows that specialists' average net income was \$315,160 in that year. Employment of dentists is expected to grow about as fast as average for all occupations through 2016. Although employment growth will provide some job opportunities, most jobs will result from the need to replace the large number of dentists expected to retire. Job prospects should be good as new dentists take over established practices or start their own. (Occupational Outlook Handbook, 2008-2009.)

Dental Education

Currently there are 58 dental schools in the United States (6 in California) and 10 Canadian dental schools. Most dental schools award the degree of Doctor of Dental Surgery (D.D.S.). The rest award an equivalent degree, Doctor of Dental Medicine (D.M.D.). Dental school usually lasts 4 academic years. Studies begin with classroom instruction and laboratory work in basic sciences including anatomy, microbiology, biochemistry, and physiology. Beginning courses in clinical sciences, including laboratory techniques, are also provided at this time. During the last 2 years, students treat patients, usually in dental clinics, under the supervision of licensed dentists. All 50 States and the District of Columbia require dentists to be licensed. In most States, a candidate must graduate from a dental school accredited by the American Dental Association's Commission on Dental Accreditation, and pass written and practical examinations to qualify for a license. A degree in dentistry can lead to dental careers in a variety of settings including, academic dentistry, general dentistry (private or group practice), dental specialties, dental research, public policy, international health, and government/military.

There are 10 clinical fields in dentistry:

General Dentistry: use their oral diagnostic, preventive, surgical, and rehabilitative skills to restore damaged or missing tooth structure and treat diseases of the bone and soft tissue in the mouth and adjacent structure

Dental Public Health: treats the community rather than the individual patient

Endodontics: deals with diseases of the pulp and other dental tissues

Oral and Maxillofacial Pathology: study and research of the causes, processes, and effects of diseases with oral manifestations

Oral and Maxillofacial Radiology: taking and interpretation of conventional, digital, CT, MRI, and allied imaging modalities of Oralfacial structures and disease.

Oral and Maxillofacial Surgery: concerned with diseases, injuries, and defects of the neck, head, jaw, and associated structures

Orthodontics and Dentofacial Orthopedics: concerned with treating problems related to irregular dental development, missing teeth, and other abnormalities

Pediatric Dentistry: concerned with the treatment of children, adolescents and young adults whose dental development is not complete

Periodontics: concerned with diseases that affect the oral mucous membranes that surround and support the teeth

Prosthodontics: science and art of replacing missing natural teeth with fixed or removable substitutes

Pre-Dental Preparation

Most schools require a minimum of 2 years of undergraduate education (also called "predental education"). However, most dental students have at least a bachelor's degree. According to ADEA: Official Guide to Dental Schools, of all the United States students entering dental schools, more than 90% had completed 4 or more years of college. When selecting students, schools consider scores earned on the Dental Admission Test (DAT), the applicants' grade point average, and information gathered through recommendations and interviews. Aside from prerequisite courses, it is recommended that students engage in extracurricular activities such as volunteering in a dental setting and community service. Pre-dental students should be able to demonstrate their potential for independent critical thought, leadership, concern for others, and an understanding of the dental profession. Additionally, pre-dental students should work at developing and/or improving manual dexterity and eye-hand-coordination.

For the year 2007, about 34% of applicants were accepted to dental school (13,742 applicants and 4,733 enrollees). **The average Science GPA for accepted students to US dental schools is a 3.46, with ranges of 3.1 to 3.7, depending on the program.**

Major:

Any major is appropriate for dental school preparation. While a science major requires many of the same basic prerequisites, selecting a science major is not required for admission to any dental school. Students are advised to select a major they find interesting and to work at developing a broad-based, interdisciplinary foundation of knowledge and skills from which they can build upon.

Course requirements for dental school:

Prerequisite admission requirements vary from school to school. For the specific requirements at individual dental schools, refer to ADEA: Official Guide to Dental Schools available on the American Dental Education Association (ADEA) website: <http://www.adea.org>. Listed below are the prerequisite admission requirements for most U. S. Dental schools.

This is NOT a comprehensive list of prerequisites for all dentistry programs. Students maintain responsibility for verifying course selection with individual dental programs.

Courses that fulfill admission requirements for dental schools:

One Year of General Chemistry with Lab
One Year of Organic Chemistry with Lab
One Year of General Biology with Lab
One Year of General Physics with Lab
One Year of English (Comp. and Lit.)

Recommended (required at some schools):

One semester to one year of Math (Calculus)
One or more courses in Psychology (required at UCLA, UCSF)
One course in Statistics
One or more courses in Biochemistry (required at UCLA, UCSF, Loma Linda)
Other courses for consideration include: anatomy, histology, physiology, microbiology, social sciences, communication, business, technical writing, fine arts, drafting, sculpting, engineering, speech, and foreign language.

DAT:

All United States dental schools require applicants to take the Dental Admissions Test (DAT). All Canadian schools require the Canadian Aptitude Test. The American Dental Association states that successful participation in the Dental Admission Test Program requires completion of at least one year of collegiate education (courses in Biology, General Chemistry, and Organic Chemistry). The DAT is entirely multiple choice and consists of 4 separate sections:

- Survey of Natural Sciences (Biology, General Chemistry, and Organic Chemistry)
- Perceptual Ability (Two-and three-dimensional problem solving)
- Reading Comprehension (Dental and Basic Science)
- Quantitative Reasoning

Schools vary in their emphasis on the different parts of the test. The DAT is administered on computer almost any day of the year. Applicants should register to take the DAT at least one month before the intended test date.

The UCLA School of Dentistry offers pre-dental laboratory courses to strengthen perceptual skills. These courses are offered over weekend days a few times a year. Visit the following website for additional information: <http://uclasod.dent.ucla.edu/continuingeducation/> and click "Pre-Dental Courses."

Application:

The Associated American Dental Schools Application Service (AADSAS) is a centralized application service sponsored by American Dental Education Association (ADEA). This web-based service is required of all students applying to the 54 dental schools and one Canadian dental school that participate in the application service. AADSAS simplifies the application process by allowing applicants to complete only one application form. AADSAS then sends the applicant's information in a standardized format to the dental schools that the applicant listed on the AADSAS application. Applications for dental schools that do not participate in AADSAS can be obtained directly from the individual schools.

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