

NATURE OF THE 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. The United States Department of Labor Statistics reports that in 2016, dentists held about 153,500 active jobs in the United States ([Occupational Outlook Handbook, OOH, 2017-2018](#)). Dentistry requires diagnostic ability and manual skills. Dentists should have a 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, the ADA reports that in 2014 the average net income for an independent private practitioner who owned all or part of his or her practice was \$183,340 while the overall median pay for dentists was \$158,120, and dental specialists earned an average net income of \$344,740. Employment of dentists is expected to grow 19% from 2016-2026, faster than average for all occupations through 2022. While 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 (OOH 2017-2018).

CLINICAL FIELDS OR SPECIALITIES IN DENTISTRY:

1. **General Dentistry:** uses 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.
2. **Dental Public Health:** treats the community rather than the individual patient.
3. **Endodontics:** deals with diseases of the pulp and other dental tissues.
4. **Oral and Maxillofacial Pathology:** studies and researches the causes, processes, and effects of diseases with oral manifestations.
5. **Oral and Maxillofacial Radiology:** takes and interprets conventional, digital, CT, MRI, and allied imaging modalities of oral-facial structures and diseases.
6. **Oral and Maxillofacial Surgery:** deals with diseases, injuries, and defects of the neck, head, jaw, and associated structures.
7. **Orthodontics and Dentofacial Orthopedics:** treats problems related to irregular dental development, missing teeth, and other abnormalities.
8. **Pediatric Dentistry:** treats children, adolescents and young adults whose dental development is not complete.
9. **Periodontics:** treats diseases that affect the oral mucous membranes that surround and support the teeth.
10. **Prosthodontics:** replaces missing natural teeth with fixed or removable substitutes.

(See the American Dental Education Association: Official Guide to Dental Schools, 2014 for more information).

PRE-DENTAL PREPARATION

Most schools require a minimum of 2 years of undergraduate education (also called "pre-dental 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, and about 6.3% had graduate training. 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 fall 2016 entering class, about 50.6% of applicants were accepted to dental school (12,058 applicants and 6,100 enrollees). **In 2016, the mean GPA for accepted students to U.S. dental schools was 3.55 (Total) and 3.46 (Science) (ADEA: Official guide to Dental Schools, 2016). The average 2016 enrollee DAT test score was 20.3.**

MAJOR

Any major is appropriate for dental school preparation. While a science major requires many of the same basic pre-requisites, 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.

OTHER FACTORS THAT CAN MAKE YOU A MORE COMPETITIVE APPLICANT:

- Become involved in pre-dental or pre-health student organizations. If none exist, consider starting a local chapter.
- Demonstrate your leadership by organizing a project, working with others, and achieving a goal.
- Shadow a practicing dentist and volunteer at community health clinics.
- Become involved in a research project (does not have to be dentistry-related). Find an experience that helps you develop critical thinking skills.
- Become informed about health care issues, legislation impacting health care, and access-to-care issues.
- Get acquainted with faculty and advisors (you will eventually be asking for letters of recommendation).
- Request letters of recommendation early and apply early.
- Make sure your social media profiles are either on private or are very professional.
- Proof read your application.
- Make sure the personal statement is well written and original.

http://www.adea.org/GoDental/Application_Prep/The_Application_Process/10_tips_to_apply.aspx

DENTAL EDUCATION

Currently there are 65 dental schools in the United States (6 in California). 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, and public policy, international health, and government/military.

DENTAL ADMISSION TEST

All United States dental schools require applicants to take the Dental Admission Test (DAT). 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:

1. **Survey of Natural Sciences** (Biology, General Chemistry, and Organic Chemistry)
2. **Perceptual Ability** (Three-dimensional manipulation and spatial reasoning problem-solving)
3. **Reading Comprehension** (Three academic essays followed by comprehension questions)
4. **Quantitative Reasoning** (Mathematical problems in algebra, numerical calculations, conversions, trigonometric identities, etc.)

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, and at least one year prior to when they hope to enter dental school.

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:

<https://www.dentistry.ucla.edu/learning/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 dental schools located in the United States and Puerto Rico. 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. Note that Canadian dental schools require direct applications. *For more information about dental schools, visit <http://www.adea.org/GoDental/>*

COURSE REQUIREMENTS FOR DENTAL SCHOOLS

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 in the American Dental Education Association (ADEA) website: <http://www.adea.org/>. Listed below are the prerequisite admission requirements for most U. S. Dental schools.

The information above is reprinted with permission from CSULB's Health Professions Advising Office: <http://web.csulb.edu/colleges/cnsm/sas/hpao/planning.html>

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

IVC Courses that fulfill admission requirements for dental school:

Pre-Dental Coursework	IVC Courses
One year of General Chemistry with lab	CHEM 1A and 1B
One year of Organic Chemistry with lab	CHEM 12A and 12B
One year of General Biology with lab that includes one upper division Biology course.	BIO 5 and (BIO 16 or BIO 83); or BIO 80/80H and BIO 81/81H
One year of General Physics with lab	PHYS 2A and 2B or PHYS 4A and 4B
One year of English (Comp. and Lit.) (some schools MAY take equivalent courses)	WR 1/1H and WR 2/2H

Recommended courses (required at some schools):

Pre-requisite Courses	IVC Courses
Additional courses in biology, including anatomy	BIO 11 (required at University of Pacific)
One or more courses in Psychology	PSYC 1/1H (required at UCLA, UCSF)
One or more courses in Biochemistry	BIO 10 (required at UCLA, UCSF* and Loma Linda**)
One semester to one year of Math (Calculus)	MATH 3A/3AH and/or MATH 3B/3BH
One course in Statistics	MATH 10 or ECON 10/10H or MGT 10/10H or PSYCH 10/10H

*UCSF requires Biochemistry be taken at a 4 yr. institution

**Loma Linda University - a full year recommended

Other courses for consideration include: histology, physiology, human or comparative anatomy, social sciences, microbiology, communication, business, technical writing, fine arts, philosophy, drafting, sculpting, engineering, speech, foreign language and classics.