

Pre-Dentistry

Prerequisite Courses

Required and Recommended Courses	Mason Courses
Biology 2 semesters	BIOL 213/Cell Biology BIOL 311/Genetics
Anatomy & Physiology (strongly recommended)	BIOL 430/431
Biochemistry 1 semester	BIOL 483/CHEM 483 Biochemistry
General Chemistry 2 semesters	CHEM 211/ General Chemistry CHEM 212/ General Chemistry
Organic Chemistry 2 semesters	CHEM 313/315 Organic Chemistry I CHEM 314/318 Organic Chemistry II
College Physics 2 semesters	PHYS 243/244 College Physics PHYS 245/246 College Physics
English 2 semesters	ENGH 101 ENGH 302
Statistics (strongly recommended)	BIOL 214 or STAT 250
Psychology 1 semester (strongly recommended)	PSYC 100 Basic Concepts in Psychology
Sociology 1 Semester (strongly recommended)	SOCI 101 Introductory Sociology

Required and recommended coursework can vary by school. Strongly recommended courses include 300 level and above biology courses such as Anatomy & Physiology, Histology, Immunology, Microbiology, Molecular Biology and Zoology.

Many dental schools continue to require Organic Chemistry II (CHEM 314/318).

Some schools require college math and others require one or two semesters of calculus or one semester of calculus and one semester of statistics.

Additionally, some schools require two semesters of English.

Schools vary as to whether they will accept Advanced Placement, community college or online coursework to meet prerequisites.

Applicants are encouraged to research the specific requirements for the schools they are considering. Information regarding each dental school can be found in the ADEA Official Guide to Dental School available through [ADEA](#).

DENTISTRY

According to [Explore Health Careers](#), “Dentistry is the branch of the healing arts and sciences devoted to maintaining oral health. It is a dynamic health profession, offering opportunities to become a successful, highly respected member of the community. Dentists enjoy excellent compensation and the high demand for dental care is likely to continue in the future. The realization that oral health can have a serious impact on systemic health drives the expansion of new professional opportunities each year...Approximately 80% of all dentists are general dentists. Additional experience, training or education beyond a DMD or DDS allows general dentists to further specialize in the following fields:

- Endodontics – diagnosis and treatment of injuries that are specific to the dental nerves and pulp (matter inside the tooth).
- 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 oral-facial structures and disease.
- Oral and Maxillofacial Surgery – diagnostic services and treatment for injuries, diseases, and defects of the neck, head jaw, and associated structures.
- Orthodontics and Dentofacial Orthopedics – diagnosis and treatment of problems related to irregular dental development, missing teeth, and other abnormalities.
- Pediatric Dentistry – treatment of children from birth to adolescence.
- Periodontics – corrective surgery on gums and supporting bones to treat gum disease.
- Prosthodontics – restoration and replacement of teeth damaged by decay, lost from trauma or disease, with fixed or removable appliances constructed with newly developed dental material.
- Dental Public Health – development of policies and programs, such as health care reform, that affect the community at large.”

CAREERS IN DENTISTRY

Information about careers in dentistry may be found at [ADEA](#).

EMPLOYMENT OUTLOOK AND EARNINGS

The current [Bureau of Labor Statistics Occupational Outlook Handbook for Dentists](#) can be found online.

APPLYING TO DENTAL SCHOOL

Admission to dental school has become very competitive over the past few years. Students who feel they have realistic potential for acceptance to medical school should plan carefully to improve their chances. Some helpful guidelines are:

- Apply early (late spring) of the year before the expected year of matriculation.
- Submit application to schools that best match your strengths.
- Obtain practical clinical experience in a general dentistry setting. Some schools require 100 - 150+ hours of pre-application shadowing.
- Volunteer to work with underserved populations.

Most dental schools participate in the [American Association of Dental Schools Application Services \(AADSAS\)](#) which is a centralized application service. AADSAS provides uniform information about applicants in a standardized format. As a rule, students should initiate the [application process](#) approximately one year and two months prior to the expected date of entry into dental school.

STANDARDIZED TEST: DENTAL ADMISSIONS TEST (DAT)

Dental school applicants must take the [Dental Admissions Test \(DAT\)](#) which helps evaluate an applicant's aptitude for dentistry. The [DAT](#) is designed to assess a student's knowledge of natural sciences, reading comprehension, quantitative reasoning, and perceptual ability. The DAT is given at Thomson Prometric Test Centers on a computer and is administered almost every day of the year. Students are encouraged to take the test at least one year prior to their anticipated entry into dental school. The DAT is a four hour and fifteen minute test.

PRE-DENTISTRY ADVISING

The information contained in this information sheet should be discussed with [the Health Professions Advisor](#). The availability of these health professions advising opportunities is announced through the [HEALTHPROFESSIONS-L email listserv](#) for Mason students.

Students must still be advised in their department regarding their major.

7/27/2015