**PRE-DENTISTRY**

*JMU Pre-professional Health Programs*

**GENERAL OVERVIEW**

Dentists (DDS and DMD) are healthcare professionals who examine the head, neck, and oral cavity to identify and diagnose conditions that influence oral and systemic health. Dentists diagnose and treat diseases, restore or replace damaged teeth, perform corrective surgery, reduce pain and discomfort, and provide instruction on oral health. Most dentists (~90%) deliver oral health care through private practice; approximately 10% of dentists deliver care in other clinical settings, teach in dental education, conduct research, and/or work in public policy. Some dentists (~20%) specialize in fields like endodontics, oral and maxillofacial surgery, orthodontics, periodontics, prosthodontics or dental public health.

**CHOOSING A MAJOR**

Pre-dental students typically obtain a Bachelor of Science (B.S.) or Bachelor of Arts (B.A.) degree while completing the requirements for admission to dental school. Dental schools do not require or prefer a particular undergraduate major. Admissions committees welcome students whose intellectual curiosity leads them to a wide variety of disciplines. Dental schools recognize the importance of a strong foundation in the natural sciences – biology, chemistry, physics – as well as behavioral sciences and statistics. Thus, applicants must complete course requirements and demonstrate proficiency in the sciences as evidenced by the science GPA, overall GPA, and scores on the DAT.

**PREREQUISITES**

Admissions requirements for 61 US and 10 Canadian dental schools are found in the *ADEA Official Guide to Dental Schools* which is published annually by the American Dental Education Association (ADEA). Pre-dental students must explore school-specific admissions information because there is considerable variability among dental schools regarding required and recommended coursework. Up-to-date, reliable information is available at the ADEA website (www.adea.org) and their career building and social networking site GOdentalSM (info.adea.org/dep/).

Minimum requirements for admission to dental school can be met at JMU by completing the following courses:

- **BIO 114** Organisms (4 credit hours)
- **BIO 214** Cell & Molecular Biology (4 credit hours)
- **PHYS 140/150** College Physics I & II (8 credit hours; including laboratory 140L-150L)
- **CHEM 131/132** General Chemistry I & II (8 credit hours; including laboratory 131L-132L)
- **CHEM 241/242** Organic Chemistry I & II (8 credit hours; including laboratory 242L)

Students are strongly encouraged to take a course in **Psychology** (GPSYC 101 or 160) as well as additional coursework in **Anatomy** (BIO 290 or 320), **Physiology** (BIO 370), **Microbiology** (BIO 380), and **Biochemistry** (CHEM 361). [Note: VCU School of Dentistry requires that applicants complete Biochemistry (CHEM 361).]

We strongly recommend you complete a minimum of **6 credit hours of Mathematics (calculus and statistics)** and **6 credit hours of English (composition and literature)**: ENG, GENG, GHUM200 or GWRTC). Not all dental schools accept AP credit in English or sciences. A small number of dental schools have specific mathematics requirements.

**ADMISSIONS CRITERIA & ACADEMIC RECORD**

Admissions committees assess biographical and academic information provided by the applicant and by the undergraduate school(s) attended. Of particular importance are grade point averages (GPA), results from the Dental Admission Test (DAT), dentistry-related experience and service activities, letters of evaluation, and interviews. Academic performance records encompass cumulative and science GPAs, subjects and credit hours completed, rigor of the baccalaureate program, as well as trends in performance, *i.e.*, was an average freshman year followed by improvement during the sophomore and junior years? was the level of performance relatively constant or irregular? A strong undergraduate academic record is considered evidence of both ability and motivation. If a student has both high aptitude and motivation, a competitive academic record is expected!
STANDARDIZED TEST
The Dental Admissions Test (DAT) is required for admission to all dental schools (www.ada.org/dat). The DAT is conducted by the American Dental Association (ADA) and is administered at Prometric Test Centers at locations throughout the US, US Virgin Islands and Canada. The DAT is a four-part multiple choice test that measures reading comprehension, quantitative reasoning, perceptual ability, and aptitude in science disciplines (biology, general chemistry, and organic chemistry). The DAT can be taken at any time, but it is recommended that you take it in late spring or early summer of the application year. If a student needs to re-take the DAT, re-examination can be scheduled a minimum of 90 days following the previous attempt.

PREPARATION TIMELINE
Candidates for the DAT should have completed pre-requisite courses in biology, general chemistry, and organic chemistry. If the student’s goal is to obtain an undergraduate degree in four years and matriculate into dental school upon graduation (“direct-entry” applicant), the DAT and the AADSAS application need to be completed during the summer following the third year.

EXPERIENCE
Students are encouraged to seek volunteer or employment opportunities in dentistry. Examples include shadowing a dentist, completing an internship program, or volunteering in a community health clinic. Pre-health enrichment programs (explorehealthcareers.org or smdep.org) can also help a student decide if a career in dentistry is a good fit! Students are encouraged to join a pre-dental society, and to participate in recruitment fairs and open houses to learn about dentistry and dental schools. Shadowing a dentist(s) and keeping a log documenting the hours is recommended. VCU School of Dentistry requires that applicants complete 150 documented hours of shadowing.

EVALUATIONS/RECOMMENDATIONS
All dental schools require submission of letters of evaluation as part of the application. JMU students and alumni are encouraged to utilize the PPH Evaluation Service to assemble a packet of evaluation letters that will fulfill the requirements of all U.S. dental schools.

PPH ADVISING RESOURCES
The Institute for Innovation in Health and Human Services (IIHHS) and its staff of dedicated coordinators function to assist pre-professional health students in their career planning and to help them realize their aspirations by providing the specific information, advice and assistance that is critical to their success. Dr. Jeanne Wenos is the Pre-dentistry Program Coordinator [wenosjz@jmu.edu, Health & Human Services Building 3115, (540) 568-2841].

The Pre-dental Society welcomes students to their meetings and encourages students to become members. Pre-professional student organizations provide health career information that is invaluable to the pre-professional student. Active involvement in student organizations is evidence of students’ desire to enhance their undergraduate experience.

Note: Students planning professional health careers are encouraged to discuss their goals with pre-professional health advisors. It is important to begin the planning process when students’ studies are initiated and imperative that students plan career options. The admissions information presented above should be used only as a guide when planning a pre-professional health curriculum. Students should not interpret these guidelines as definitive statements regarding the admissions requirements or policies of individual schools and colleges of professional health. Since each institution specifies its own requirements and procedures, it is essential that students become familiar with these requirements and make appropriate course selections in consultation with their pre-professional health and academic advisors. Admissions requirements are necessarily limited to provide flexibility in the undergraduate program. The course requirements for most professional health programs are similar and usually specify minimum credits in natural and behavioral or social science disciplines. Schools of professional health recognize the desirability of students having a variety of interests and diverse backgrounds. Applicants are urged to explore diverse cultures and disciplines in the humanities and sciences.

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