



Pre-Health Professions Program: Pre-Medical / Pre-Dental Program

The Program

The Pre-Medical/Dental Program at Berea College is just that - A Program. We do not have a "Pre-med" or "Pre-dent" major. You will complete the pre-medical/dental curriculum and other recommended training experiences within the context of your selected disciplinary major. The academic program at Berea College has a strong liberal arts tradition in which breadth of knowledge is emphasized. Students are expected to gain a broad and diverse background in the humanities, the life and physical sciences, the social sciences and mathematics. In-depth study occurs within the context of your disciplinary major. Coursework in both the General Education [GSTR] curriculum and your "major" curriculum will help you to develop the critical thinking abilities and written & oral communication skills so important to your success as a health care professional. The medical and dental professions need and seek individuals who will bring a diversity of talents, interests and training to the field.

Choice of a Major

The academic discipline in which you choose to "major" at Berea College should be determined by your interest. Do not choose a major because you believe it will increase your chances of getting accepted into medical or dental school. Your academic performance in a major that you find interesting and challenging will be far superior to one in which you have only a passing interest. Your major should provide the knowledge and experience base from which you can pursue many career paths in addition to medicine. Medical school admission committees do not show preference for one major over another.

Many students (including those at Berea College) chose to pursue a science major such a Biology or Chemistry because completion of the pre-medical/dental curriculum requires a significant amount science coursework. It is, however, entirely possible to complete the pre-med/dent curriculum within the context of other majors. Recent Berea graduates have entered medical school after majoring in Art, Psychology, and English as well as the natural sciences.

Understanding the basic principles of science is essential to students pursuing study in the medical field. Medical and dental schools expect that entering students have a thorough knowledge of modern concepts in biology, chemistry, physics and mathematics. Most medical and dental schools require (at a minimum) one year of biology, two years of chemistry, one year of physics and one year of mathematics as prerequisites to entry. The Berea College pre-medical/dental curriculum goes well beyond the minimum standard. See the Berea College Pre-Medicine or Pre-Dentistry Guides for specific curriculum details. Advanced coursework may vary depending on student interest.



Advising

You have been already been assigned an academic advisor who will help you with course selection, schedule planning, registration, etc. Your academic advisor should have all the information necessary to aid you in preparing your pre-medical or dental curriculum plan. Most students who indicate an interest in the pre-med or pre-dent program are assigned a science faculty member as an advisor if at all possible.

A group of faculty members particularly knowledgeable in health career advising are the members of the **Pre-Medical/Pre-Dental Advisory Committee** (See the "Pre-Med/Pre-Dent Committee" link for a list of the advisory members.) Early in the program (hopefully during your freshman year) you should introduce yourself to **Dr. Dawn Anderson** (Biology) who serves as Chair of the Committee. She will make sure your name gets entered into the Pre-Med/Pre-Dent database. It is your responsibility to let Dr. Anderson know that you are planning on pursuing career in medicine or dentistry and will be part of the pre-med/dent program. We currently have no other official way of knowing that you are going to be pursuing a pre-medical/dental curriculum. It is very important that you do this as early in your academic career as possible or as soon as you decide (if you happened to make this decision later). Preparation for medical and dental school has changed significantly over the past few years. The Committee wants to make sure you get the best and most accurate information right from the beginning.

Dr. Anderson strongly encourages you to drop by her office (Science Building, Rm 206; X 3349) any time you have questions about the pre-medical/dental curriculum or about the Pre-Medical/Dental Program in general. Other members of the Advisory Committee would be happy to assist you as well, but do make sure you have let Dr. Anderson know you want to be included on the active Pre-Med/Dent student list.

The **Pre-Medical/Pre-Dental Advisory Committee** also assists students who are actively in the process of applying to medical or dental school. The Committee will conduct an interview meeting with you during the Spring of your Junior &/or Senior year to assist you in the application process, in preparing your personal statement and in the medical or dental school interview process. The Committee is also the entity that will be writing your recommendation letter to medical or dental school. Individual faculty members do not write letters of reference to medical or dental schools, although the Committee will consult with other professors, your labor supervisor, and other staff members with whom you have worked closely. The interview with the Committee helps the members write a thoughtful and detailed letter of reference. The Committee also can advise you about other post-graduate opportunities they might wish to consider. Dr. Anderson will arrange for you to meet with the Committee at the appropriate time.



***Important Factors in Admission Selection:
Preparation within the Pre-Medical/Pre-Dental Program***

I. Academic Achievement

Medical and dental schools all seek students who have demonstrated a high level of scholastic achievement. Primarily, college grades (science and overall GPA) and your score on the Medical College Admission Test (MCAT) or Dental Admission Test (DAT) are used to measure this quality.

To be a **competitive medical school candidate**, you should have a grade point average of 3.6 or better and at least a 50 percentile ranking on the MCAT V admission test; in 2017, the 50th percentile ranking corresponded a score of 500. (MCAT total scores range from 472 – 528.) The MCAT V consists of four sections: Biological and Biochemical Foundations of Living Systems; Chemical and Physical Foundations of Living Systems; Psychological, Social, and Biological Foundations of Behavior; and Critical Analysis and Reasoning Skills. Each section is scored from 118-132 points with the mean score in each section being approximately 125 points.

To be a **competitive dental school candidate**, you should have a grade point average of 3.5 or better and at least an average score of 17 points (50th percentile). The DAT consists of six category areas: Biology, General Chemistry, Organic Chemistry, Quantitative Reasoning and Visual Perception. Each section is scored from 1-30 points. Your point total from each category is added together then averaged to obtain your DAT point score.

II. Motivation and Humanistic Concern

Medical and dental schools all seek students who have demonstrated a high degree of concern and compassion for those around them. Volunteering in activities that help those in need is a perfect way to demonstrate your desire to serve others. If you have volunteered as a high school student, don't stop. The volunteer work you do while in College is even more important. There is no lack of volunteer opportunities at Berea College. A number of student organizations including "Students for Appalachia," "People Who Care," "Habitat for Humanity," & "Adopt-A-Grandparent," to name a just a few, can offer you many opportunities to help others in the community. While it is nice to have clinical volunteer experience, your volunteer work does not necessarily have to be medicine- or dentistry-related. Helping others can take many forms. Some students have also individually pursued volunteer opportunities at St. Joseph's Berea Hospital, at local long-term care facilities, or at various organizations in the Berea, Richmond or Lexington area. It's important that you volunteer consistently throughout your college career. Not only will it make you a better candidate for medical or dental school, but also it will make you a better person now and a better doctor or dentist in the future. Contact the Center for Experiential and Learning Through Service Office (Stephenson Hall) for many College-sponsored volunteer options.



III. Patient Experience: Shadowing Internship

Having some experience interacting with individuals in a health profession context is also important. A shadowing internship offers students the opportunity to apply their basic and theoretical scientific knowledge in a clinical setting. You will work intensively with your supervising physician, physician assistant, nurse practitioner or dentist in the clinic or hospital, learning to apply information learned in your coursework in a “real life” setting. It is suggested that pre-medical or dental students consider pursuing a shadowing internship after their second term sophomore year. You should begin planning for a shadowing experience at least on full term prior to the experience. Contact a member of the Pre-Medical/Dental Advisory Committee (who would serve as your faculty sponsor) & Esther Livingston in the Internship Office to arrange a shadowing internship.

IV. Undergraduate Research Experience

Biomedical advances are occurring at a dazzling pace. It is becoming more and more important that physicians and dentists have actual scientific research experience. Such an experience not only educates them in the scientific research process, but also gives them experience in analyzing and evaluating research findings. The Pre-Medical/Pre-Dental Advisory Committee strongly encourages you to take advantage of the many undergraduate summer research opportunities available on campus with Berea College science faculty via the Undergraduate Research and Creative Projects Program (URCPP) or at other universities or research institutions. Check with individual Berea College faculty members for summer research opportunities that may be available in their labs or keep an eye out for posted opportunities.

Berea College also has special summer undergraduate research partnerships with Vanderbilt University (Hal Moses Summer Undergraduate Research Program/Aspironaut Program), the University of Colorado at Denver, and the University of Pittsburgh. Approximately 8-10 Berea College students participate in these programs each summer. These programs include a summer stipend and paid housing. Other research opportunities may be found directly on the Biology Departments Research Opportunity Moodle site or by doing an Internet search.

It is also possible to engage in undergraduate research during the academic year as an Independent Study [under the guidance of a Berea College faculty member]. Most Berea College professional school applicants report that they were asked about their undergraduate research experiences during their medical/dental school admission interviews.



V. Cultural Awareness and Sensitivity

As you may have noticed, we live in a multicultural society. You will get to experience this first hand at Berea College. You will meet and interact with many students, faculty and staff whose customs and beliefs are different from the ones you were taught. You should take advantage of the diversity of Berea College to become more aware and more sensitive to those individuals whose culture and life experiences differ from yours. As a physician or dentist you will likely meet and treat patients from a diverse variety of backgrounds. Take advantage of the many different cultural offerings at Berea College. Learn a new language; enroll in an international experience course; attend a cultural Convocation; join the Cosmopolitan Club. Challenge yourself to embrace and understand those who are different from you. These experiences will enrich your life, now and in the future.

VI. High Standards of Personal Character and Integrity

As a physician or dentist, your patients will be entrusting you with their most private medical information. You should consider this an honor. With this privilege, however, comes great responsibility. You will be expected to treat your patients with the greatest degree of respect and consideration. They should expect nothing less of you. We expect you to demonstrate and practice the same high standards of personal excellence while you are a student at Berea College. The Pre-Medical/Pre-Dental Advisory Committee expects you to develop and maintain exemplary standards of personal behavior as befits the profession for which you are preparing.



Applying to Medical or Dental School

The actual process of applying to medical or dental school usually begins during Spring / Summer of your Junior or in the Senior year (if doing a gap year). During this time, students take the MCAT or DAT. These are both computer-based tests. Scores are sent to the appropriate application service. Application to most medical and dental schools is handled by a centralized application agency. The American Medical College Application Service (AMCAS) is the agency that handles most allopathic (M.D.) medical school applications, the American Association of Colleges of Osteopathic Medicine Application Service all osteopathic (D.O.) medical school applications and the American Association of Dental Schools Application Service (AADSAS) most dental school applications. AMCAS, AACOMAS and AADSAS applications are available on-line.

Students should begin preparing their applications no later than the Spring Term of their Junior year. You should complete a “mock” application before submitting your “real” application. The application agencies usually begin accepting applications in early June. Medical and dental schools have “rolling admission” policies. Applications are reviewed and candidates are accepted on a continual basis. The sooner your AMCAS, AACOMAS or AADSAS file is submitted and complete, the sooner it will be reviewed and acted on by the appropriate medical or dental school admissions committee. Students are encouraged to complete and submit their applications by early-July. Do not wait until the “official” deadline listed by the individual medical school. You will seriously reduce your chances of acceptance if you do. This is no time to procrastinate. Please ask a Pre-Med/Dent Committee member for any assistance you might need in completing your application. You are especially encouraged to have a Committee member assist you in writing and editing your personal statement.