Pre-Health Professions Student Handbook

Central Connecticut State University

Introduction

The Pre-Health Professions Advisory Committee is dedicated to helping students interested in pursuing professional degrees in medicine (allopathic, osteopathic and naturopathic), dentistry, physician assistant, veterinary science, pharmacy, podiatry, chiropractic, optometry and nursing. The committee will help you obtain admission to the desired professional school. Throughout your undergraduate years, you should feel free and are encouraged to meet with committee members to discuss your progress or any other concerns you may have about your studies. The process of getting ready to apply to health professional school truly begins in your freshman year. You should contact Dr. Neil Glagovich (glagovichn@ccsu.edu, 860.832.2681) to make sure that you are assigned a mentor to help you through the application process.

Advisement

Any faculty member who serves on the Pre-Health Committee can advise students on pre-professional school curriculum. When you show an interest in attending a professional program, Dr. Glagovich will assign you a mentor who will work with you to make sure you are taking classes that fulfill the prerequisites required for your program of interest. You should meet with your faculty mentor each semester, beginning in your freshman year, or as soon as you decide to enter a health profession. They will assess your academic progress and suggest courses for the upcoming semester. Please see your pre-health mentor before you meet with your regular academic advisor. You can contact Dr. Neil Glagovich at 860-832-2681 or by email at glagovichn@ccsu.edu. You may request that your regular advisor be a member of the Pre-Health Committee. This will allow us to get to know you and will help us act as an advocate for you later. Members of the Committee are:

- Dr. Neil Glagovich, Chemistry and Biochemistry, Committee Chair [glagovichn@ccsu.edu -or- 860.832.2681]
- Dr. Michael Davis, Biomolecular Sciences, Post Baccalaureate Program Coordinator [davism@ccsu.edu -or- 860.832.2661]
- Dr. Mark Jackson, Biology [jacksonmae@ccsu.edu -or- 860.832.2650]
- Dr. Kathy Martin, Biomolecular Sciences [martink@ccsu.edu -or- 860.832.2678]
- Dr. Sadie Marjani Biology [Sadie.marjani@ccsu.edu -or- 860.832.2659]
- Dr. Nimmi Sharma, Physics [sharmanim@ccsu.edu -or- 860.832.2937]

The Curriculum

Central Connecticut State University does not have a "pre-med" major. This is not required, nor do admissions committees of health professions schools prefer it. Most students major in the sciences, although this is not required either. For most professional schools, there is a basic set of courses that are required as follows:

General Biology: This may be satisfied by BIO 121, 122 or BMS 102, 103, 201

General Chemistry: CHEM 161, 162, 200, 201

Organic Chemistry: CHEM 210, 211, 212, 213

Biochemistry: CHEM 354 (required by some schools, recommended by others)

General Physics: PHYS 121, 122 or PHYS 125, 126

Mathematics: MATH 119. Calculus is recommended: Math 125 or 152

Social Sciences: Psychology (Psy 236) and Sociology (SOC 111)

Most medical and dental schools require these courses; however, other professional schools may vary in their requirements. The list below contains links to websites for professional school prerequisites for some of the health professions:

Veterinary: https://www.aavmc.org/data/files/vmcas/prereqchrt14.pdf

Optometry: http://www.opted.org/wp-content/uploads/2013/08/ASCO-Admission-Requirements-Handbook-2013.pdf

Physical Therapy: http://www.ptcas.org/ProgramPrereqs/

Pharmacy:

http://www.aacp.org/resources/student/pharmacyforyou/admissions/admissionrequirements/Documents/School%20Adm ission%20Requirements.pdf

Chiropractic: http://www.chirocolleges.org/prospective_students.html

Physician Assistant: https://www.aapa.org/Become-a-PA/

We suggest that you check the websites of the schools you are interested in attending and note their specific requirements. These sheets should be part of your student portfolio. Contents of the portfolio will be discussed in a separate section.

As a pre-health professions student you have three goals 1) to be admitted to professional school 2) to be a successful health professional student and 3) to be a successful health professional. The courses listed above are the MINIMUM that will prepare you for the MCAT or other professional school admissions test. The MCAT exam and many other professional exams are taken in April of your junior year, or August following your junior year. THE COURSES LISTED ABOVE NEED TO BE COMPLETED BY SPRING OF YOUR JUNIOR YEAR!!

To ensure your success as a health professional student, we highly recommend that you take additional science courses, to expose you to material you will see again in health professional school. There is a wide range of courses available in Biology, Biomolecular Sciences, Chemistry and Biochemistry, Physics, Psychology or Math that you may be interested in taking and you should discuss this with your advisor or with your committee mentor.

We have listed below a suggested schedule for the courses needed for admission to and exam preparation for professional schools. Note that you will need to add courses as required for your major, minor and the general education requirements. Also, depending on the type and actual professional school you plan on attending, there may be other requirements that substitute for the suggested courses below. You may discuss your options with your committee mentor and your advisor.

	Fall Semester	Spring Semester
Freshman Year	BIO 121 or BMS 102, 103 CHEM 161, 162 MATH 119	BIO 122 or BMS 201 CHEM 200, 201 MATH 125 or 152
Sophomore Year	CHEM 210, 211 PHYS 121 or 125	CHEM 212, 213 PHYS 122 or 126
Junior Year	CHEM 354 PSY 236 and SOC 111	SEST 481 or exam prep course Interview with Pre-Health Advisory Committee
Summer after Junior Year	Professional School Application	
Senior Year	Professional School interviews	

We realize that this curriculum presumes you have decided on your profession before entering CCSU. If you have not followed this curriculum, see your mentor immediately. We have had many successful health profession students who began their career preparation later, but advising is essential.

Portfolio

We suggest that you develop a portfolio during your undergraduate career. This portfolio will contain at least the following:

- 1. current transcripts
- 2. current resume
- 3. personal narrative why are you interested in pursuing this health profession?
- 4. admissions requirements of the schools in which you are interested
- 5. names and contact information of professors, employers, health professionals who know you well enough to give you a favorable letter of recommendation
- 6. abstracts or miniaturized posters of any research you have done as an undergraduate
- 7. awards received
- 8. publications

If you maintain a portfolio throughout your college career, completing your professional school application will be easy. In our experience, students who do not have a portfolio when they begin the application process, not only struggle with the application, but also under-represent their accomplishments. The Pre-Health Professions Advisory Committee will also ask to see your portfolio when they interview you in May of your junior year.

The Interview Process

One of the most important functions the Pre-Health Professions Advisory Committee performs is the drafting of a recommendation letter about you for the professional schools you apply to. For the Committee to get to know you as well as possible and to prepare you for visits to professional schools, you are required to interview with the committee in the Spring semester before you send applications to the professional schools. Normally, interviews are scheduled during the final exam period each spring semester. To request an interview, submit your portfolio to the Chair of the Pre-Health Professions Advisory Committee, no later than April 1st of the spring semester that the interview takes place.

At your interview, the committee members will be present to ask questions about your academic work, your interest in the desired field and your knowledge about the field. You should give them any information that will assist them in preparation of your recommendation letter. If you have community service, spent years in the military or invented a better mousetrap, please let the Committee know, even if it does not appear immediately applicable to your medical career. In many cases, your life experiences reflect leadership abilities, commitment, or intellectual prowess that is different from your academic record. The interview is not to judge you, but rather to collect information about you that will help the Committee write the best possible letter and to prepare you for interviews at professional schools.

Committee Recommendation Letter

The main purpose of the committee is to write a letter of recommendation for your application. Depending on the type of school you wish to attend, the process of submitting the letter of recommendation can vary. The process is outlined for several disciplines below.

Allopathic Medicine (*MD*): The committee letter goes directly to the American Medical College Application Service (AMCAS) which is administered by the Association of American Medical Colleges (AAMC). You must print an AMCAS Letter Request Form with your name, ACAS Letter ID, the letter type is a committee letter, and the sender will be Dr. Neil Glagovich. Submit the AMCAS Letter Request Form to Dr. Glagovich at:

Dr. Neil Glagovich

Central Connecticut State University

1615 Stanley Street

New Britain, CT 06050

United States of America

The letter is submitted electronically.

Osteopathic Medicine (*DO*): The Committee letter is sent electronically directly to AACOMAS. Register Dr. Glagovich's name (Neil Glagovich) and email (glagovichn@ccsu.edu) on the AACOMAS application.

Dentistry (*DDS or DMD*): The committee letter is submitted electronically directly to the Associated American Dental Schools Application Service (AADSAS), which is administered by the American Dental Education Association (ADEA). You should register Dr. Glagovich (along with his email, glagovichn@ccsu.edu) on the AADSAS application. A notification will be sent to him to upload the letter.

Veterinary Medicine (*DVM*): The committee letter goes directly to the Veterinary Medical College Application Service (VMCAS) which is administered by the Association of American Veterinary Medical Colleges (AAVMC). On the VMCAS

application, register Dr. Neil Glagovich (along with his email, glagovichn@ccsu.edu and phone number 860.832.2681). Dr. Glagovich will complete the evaluation online. If you want a letter sent through the mail (paper version), then download the Evaluation Form from the VMCAS site and submit to Dr. Glagovich for completion. Please be aware that Veterinary Medical Colleges require a total of three letters of recommendation. The committee letter serves as one of those three.

Other professional schools have different processes for letter of recommendation submission. Speak with Dr. Glagovich for help.

Application and Admission to Health Professional Schools

The applications for allopathic and osteopathic medical schools are available in May and should be completed and submitted during the summer. Medical, dental and physician assistant schools all have rolling admissions, which means that they accept applications from qualified candidates as they come in. Postponing submission of your application until the "deadline", which is often in November, means you are competing for a very few seats within a professional school class. You improve your chances for admission by **early** application. Each application will have a fee associated with it. Most schools you apply to will send you a secondary application, which also has a fee associated with it. Clearly, applying to 50 schools will be expensive! Choose the schools to which you apply carefully. You may select a school because of its geographical location, because of a particular program emphasis, or simply by desire. We suggest that you choose at least two schools that are most likely to admit you, based on students that school has previously admitted. Dr. Glagovich will be happy to discuss your choice of health professional schools with you.

For medical school, your ideal GPA would be >3.5 and total MCAT scores of 510 or above. However, we do not live in an ideal world, and there are no hard and fast rules about who will be admitted. If your MCAT scores (or your GPA) are lower, do not assume that you cannot go to medical school. There are many different avenues you and the committee can take to get you into a professional school. Since each case is different, it is worthwhile to discuss your options with Committee members and especially Dr. Glagovich.

Other Activities That Can Help Your Admission to Professional School

Although your GPA and professional school test results are the most important data on your application for admission, other activities that occur outside the classroom are extremely important. For any professional school, participation in undergraduate research (and presentation of the results at a meeting) enhances your application. Working or volunteering at a hospital or other health services area is important. This not only looks good to an admissions committee, it will help you decide if this is the career you truly desire. Health careers are varied and numerous. We encourage you to experience as many of them as you can to help you make the best possible choice for yourself.

The Pre-Health Committee may be able to help you find a volunteer position or a shadowing opportunity. However, this is really the student's responsibility, and initiative on your part looks very favorable to the committee. If you are really uncertain about what to do, please speak to any member of the committee for guidance. The shadowing experience is especially beneficial, as it exposes the student to a variety of disciplines in the health-related fields. For instance, you may believe that you want to be an obstetrician, but after shadowing one for several weeks, you may conclude that their schedule may not fit your future lifestyle aspirations. You will never know until you experience it firsthand.

Unlike medical schools, Physician Assistant schools frequently require 1000 patient contact hours prior to application. One thousand hours (25 forty-hour weeks) is a great deal of volunteer work. To receive payment for patient contact hours, many students enroll in BMS 380 Emergency Medical Technician, and gain certification as an EMT. This allows a student to be paid while accumulating patient contact hours and having the opportunity to watch the medical professions in action.

Summary

There are many things you must do to prepare yourself for application to professional schools. A high GPA and high professional school standardized test scores are important. Equally important is in-depth knowledge of the field you are interested in pursuing and non-academic activities such as research and work related to the field of interest. You should introduce yourself to committee members and get to know them starting in your freshman year. You should see Dr. Osei each semester to go over your progress.

Along the way, try to enjoy your courses and other activities you are pursuing. It is a difficult course of study you have chosen, but remember that your current activities are as important as your ultimate goal. Have some fun, stay focused, and keep in touch with the committee regularly. We are here to help you have the best opportunity for admission to a professional program and wish you the best success. Please visit our website at http://www.prehealth.ccsu.edu/

FAQ's

I had a terrible freshman year. I didn't concentrate and received poor grades. Have I ruined my chances of going to health professional schools? Should I change careers now?

Unfortunately, this is a common problem. It will ultimately drag down your GPA, but with effort and focus you will be able to regain suitable scores before application time. Don't consider changing careers just because you had a rough semester or two.

I want to be a doctor, but I really don't want to go to school for another 8 years.

Medical school is 4 years, followed by internship, residency and fellowships if you go into specializations. However, the strictly academic portion of medical school is only two years. During 3rd and 4th years you are still paying tuition, but are in the hospital, training, studying, seeing patients and doing the work of a physician. During internship, residency and fellowships, you will be paid (not extravagantly), but you will be paid. Physician assistants have a 2-3 year program of study, which is mixed academic and clinical. This is a shorter course of study, requiring less tuition. The salaries at the end are also smaller. The job is different from that of a physician, even though both give patient care. You should familiarize yourself with the duties of both professions and decide which suits you best.

I don't have the money to pay all that tuition!!

Almost no one does have the money to pay tuition. Loans are available for tuition and living expenses. You will make enough money during your professional life to repay the loans. Loan information will be given to you upon acceptance into a professional school.

I have received B+'s in all my science courses, do I really need a professional school prep course?

Preparation for the MCAT, DAT, VCAT or GRE requires strategy as well as knowledge. Whether you take a course or study from the test preparation books, you should at least familiarize yourself with the test and determine if you can take the test fast enough to be successful. There is a time limit! The safest thing to do is take this test seriously. The scores will follow you forever.