

STUDENT HANDBOOK

THE HEALTH PROFESSIONS

Admission to medical, dental or other health professional school is a highly selective matter based generally on scholarship, character and overall fitness. Traditionally, pre-health profession students have pursued science concentrations. However, health professional schools encourage applicants to select major fields of concentration that reflect their interests and require some depth of learning within a given discipline. There is no specific degree required by the health profession schools, and a student can major in any degree program that is of interest. Undergraduate preparation does require a strong base of the sciences and sufficient science courses should be taken to acquaint the student with the demands of a science-oriented curriculum.

Buffalo State College does not offer pre-medical or pre-dental as a major. These terms simply express an intention to study medicine or dentistry. However, through various other major programs, science and non-science, BSC will guide you to a career in the health professions by helping you develop the credentials necessary to gain entrance into a professional school. Buffalo State College offers all the requisite and appropriate courses for qualification to the professional health graduate schools. We also offer a vigorous advisement system for students interested in entering the health professions including medicine and dentistry. We have an active faculty Pre-Health Professions Advisement Committee, as well as a Committee Assistant, who offer support for students interested in the health professions. A library of health professions college catalogs exists within the College's Career Development Center in Cleveland Hall 306.

If you are pursuing a dream of a career as a doctor, dentist, osteopath or one of the other health professions, you must start planning early in your undergraduate career by setting out upon a course of action geared toward your goal. Students should contact the Pre-Health Professions Advisement Committee Staff Assistant, Kelly Boos at 878-6674, e-mail BOOSKG@buffalostate.edu or stop in the Dean's Office of Natural and Social Sciences, Classroom Building A-113. Those applying for admission to medical and some dental schools will need a committee evaluation as part of their application.

Application to medical school is a laborious process. One of the chief criteria for a successful application to medical school, as well as a successful medical career, is strong motivation to become a physician. If this describes you, read on.

A strong math / science background helps prepare you for entrance exams. Requirements vary from school to school; therefore you should consult the catalogs of those schools to which you wish to apply to be certain that you will satisfy their specific entrance requirements.

It is imperative that you take all of the required courses and that you obtain very good grades. Grades of C, S or P will not be acceptable. Highly recommended courses which a student should complete in order to be sufficiently prepared are:

1. Biology (8 credits) (BIO 211, 212)
2. General Chemistry (8 credits) (CHE 111-112)
3. Organic Chemistry (8 credits) (CHE 201, 202, 203, 204)
4. Physics (6-8 credits) (PHY 107-108 or 111-112)
5. Math-Calculus (6-8 credits) (MAT 126-127 or 161/163-162/164)
6. Two courses in English (6 credits) (ENG 101-102)

A full year of calculus, while generally not required for medical school, is required for many of the other health professions, and may be needed for the physics courses you choose. It is recommended that the interested student begin the chemistry sequence early in their career at the College. Note again that these courses can be incorporated into any degree the student wishes to pursue

****It is strongly recommended that admission tests be taken in the spring of the junior year****

PROCEDURES FOR APPLYING TO HEALTH PROFESSIONS SCHOOLS

Buffalo State College does participate in Early Assurance programs offered at SUNY at Buffalo Medical and Dental Schools.

See a Pre-Health Advisor in your first semester!

I. WHAT TO DO - WHEN TO DO IT:

A. Sophomore Year and Earlier

- You are advised to **complete the minimum science requirements** by the end of your sophomore year, so you are prepared to take the MCAT (or similar test) in the spring of your junior year.
- **Contact the Pre-Health Professions Advisor** if you have not already done so. Pick up forms from the committee staff assistant in the office of the Dean of Natural and Social Sciences, Classroom Building A-113. Complete and return the Data and Release Forms; a file will be established for you.
- You should have **three to five letters of recommendation** sent to the committee secretary. Try to think in terms of who will write an effective letter on your behalf. Recommendation forms are available upon request. You should make an appointment to meet personally with the professor for a relaxed discussion about your plans, academic record and course performance.
- Try to arrange for a clinical health related experience or socially relevant **volunteer work**.
- **Work on your personal statement**. This will take several months and will involve the help of your advisor or trained professionals from the career development center. **Expect to edit your essay several times.**

B. Junior Year

- **January/February:** Begin to review for the MCAT/DAT/OAT exam to be given during the spring. Many of these tests are administered online. Check online for more information and registration: MCAT: <http://www.aamc.org/> ; DAT: <http://www.ada.org/prof/ed/testing/dat/> ; OAT: http://www.opted.org/info_oat.cfm ; Visit www.kaptest.com for a free trial test.
- **March:** Be sure to file application for April board exam before the deadline. Check with the committee secretary to see that letters of recommendation are coming in.
- **April-May: Where to Apply, How Many Applications to Submit** – As soon as you determine your interest in a health career, begin researching schools. Compare your credentials against the schools you are considering. You should choose a few “dream” schools that might be a reach for you, a few realistic schools, and a few safe schools. Investigate the schools to which you will apply, and contact them for applications. Take board exam. Have advisor review personal statement and finalize.
- **April-May:** Prepare AMCAS or other application service materials (many are online applications). Re-check to be sure letters of recommendation are coming in. Schedule personal interviews with committee secretary. You will be interviewed by three members of the committee.
- **June-July:** Mail application to AMCAS and non-AMCAS schools. Mail exam applications if taking or retaking exams in August or Fall.

WHAT TO DO - WHEN TO DO IT (continued)

C. Senior Year

- **September:** Begin to think of possible alternatives, just in case. Since competition for admission into health professional schools is indeed intense, and even well qualified students will inevitably be rejected, it is wise to keep an alternative goal in mind. In fact, every pre-health student should select an alternative career. You may be questioned about it during an interview. Update your application to the schools as you accomplish more in your senior year. Don't forget thank you letters to interviewers and letter writers.
- **October:** Wait for school interviews. Good Luck! Visit this useful website: **www.studentdoctor.net**. And, please remember to keep the committee members informed of any interviews, acceptances, or rejections.

II. PROCEDURE FOR COMMITTEE APPRAISAL

Before the committee can evaluate you, we require a complete candidate folder. The following constitute a completed candidate folder:

- At least **three** letters of recommendation, two of which are from faculty in the sciences. You may have as many letters as you wish. A recommendation from an employer or colleague in the field is highly recommended. We advise that you use the recommendation forms available from us. Please note the waiver of access – many professors prefer that access be waived to letters of reference. It may be helpful to provide your recommender with your resume and/or copy of your personal statement. We also offer a guideline about helpful content in letters of recommendation.
- A copy of your board scores (MCAT, DAT, OAT, etc.)
- Transcripts - the committee secretary can obtain an unofficial copy of a Buffalo State transcript, but is unable to obtain transcripts from other colleges. Therefore, if you have taken science related courses at other institutions, it is your responsibility to provide an unofficial copy of that transcript. These transcripts are for the committee's use in your evaluation only, and will not be sent to the schools to which you apply.
- A personal statement on your goals, interests, abilities and motivation.

When the committee secretary has received all of these materials, interviews will be scheduled with committee members. The committee as a whole will then evaluate your credentials and will arrive at your final appraisal. This appraisal will be sent to the schools you have indicated. You may have the recommendation letters sent separately if you wish.

For an appointment to discuss a committee evaluation, please contact the committee secretary, Kelly Boos at 878-6674 at the office of the Dean of Natural and Social Sciences, Classroom Building A-113.

The Pre-Health Advisement committee sends out **ONLY** your recommendations (when requested) and committee evaluation. You are responsible for everything else.

III. AMCAS Applications

The American Medical College Application Service (AMCAS) is a centralized application service which enables you to file only one application which is then processed and distributed to the AMCAS participating schools you designate. The AMCAS application is four pages long and consists of three sections: Personal Data, Personal Comments and Academic Record. This is completed online. **Always keep a photocopy of everything you mail.** In the event your application is lost in the mail or misplaced by the admissions office, you can mail them a copy right away.

Your Academic Record

List all of the college level courses you have taken or plan to take. Each course, credit hours, and grade received is recorded. Science, non-science and overall grade point averages for each year and for your entire college career must be calculated. It is required to include every course attempted, even if it was a withdrawal or failure that was retaken. Omission of information or false information will count heavily against you. **IMPORTANT NOTE:** You are responsible for having your transcripts sent to AMCAS or to the non-AMCAS schools which you apply. The committee cannot do this, since the transcript must be an official one and must come from the Registrar's office. It is also advisable to request a student copy of your transcript for yourself; it will be invaluable in completing the application.

The Essay

The most important section of the AMCAS application is the page reserved for personal comments. This provides the opportunity for you to state the qualities that make you special and why the committee should choose you over other well qualified applicants. Use this essay to describe some activity which demonstrates your motivation for medicine. Your personal statement should not be just another list of all the activities and experiences you have had. It should explain the importance of your activities or experiences and how they have shaped you into the person you are. Expect to edit your essay several times. Information and guidance on writing your personal statement is available from your advisor or staff of the Career Development Center. Supplemental applications sent by specific medical schools may also require personal comments. Great care should be taken in not only answering the question(s) asked by the institution, but also in following proper rules of grammar.

****Special note on the essay****

The AMCAS application autobiographical sketch (personal statement) is your opportunity to distinguish yourself from all other applicants. This part of your application should not be taken lightly, and considerable effort and thought should be expended to make a positive statement. The following questions should serve to stimulate your thinking, but they need not all be answered.

- What experience or background have you had which makes you unique?
- What experiences have motivated you to pursue medicine as a career?
- What attributes do you have which qualify you to complete successfully a rigorous medical school curriculum?
- What personal strengths of yours will make you a competent, caring physician?
- What experiences have served to enlighten you as to what medicine is all about and why you think you have the right qualifications and commitment to successfully complete medical school and be a competent physician?

Some people use this opportunity to explain fluctuations in their academic record. If you feel this is absolutely necessary, be very careful that you don't just sound as if you are making excuses for poor performance.

A suggested plan of attack for preparing the personal statement is as follows:

1. List specific points you wish to make.
 2. Develop each topic fully with a complete paragraph.
 3. Decrease the quantity of words in each paragraph so that each point is presented crisply and concisely.
 4. Rigorously check for correct grammar and punctuation.
 5. Make sure the statement reads smoothly in addition to being concise.
 6. Have someone else read the statement. (Not your mother; she may think that everything you write is wonderful!)
- Members of the Pre-Health Advisement Committee are available to review your essay with you. Also feel free to contact the Writing Center (Ketchum Hall 323) and the Career Development Center (Grover Cleveland 306) for assistance.**

IV. ADDITIONAL THOUGHTS

Grade point averages and board scores play a significant part in the decision which the professional schools will make on your application. Some medical schools are no longer considering students whose GPA's are lower than 3.0. MCAT's should be at least a 10 in each category to be competitive. This does not mean that you will be rejected if your grades and boards are lower. However, you must bear in mind that you will be competing with students whose grades and board scores could be higher than yours.

Extracurricular activities are one of the important criteria used by admissions committees to assess the student's general motivation. In addition to academic credentials, certain characteristics are desirable in future physicians such as leadership, social maturity, curiosity and responsibility. These qualities are perceived by medical schools through interviews, recommendations, essays and extracurricular activities. Medical and other professional schools are interested in students who can demonstrate some level of achievement in any field of interest, including non-academic areas. It is crucial that students participate in some form of socially relevant clinical or research activity such as volunteering in a hospital, working on a rescue squad or scholarly research. We strongly suggest that you gain practical experience in your chosen profession. Contact and work with someone in your chosen profession and get a recommendation. Other ideas include nursing homes, ambulance services, dental clinics, and veterinary offices.

The **choice of a major** is entirely up to you. Choose a field which you will enjoy and can do well in. Be sure that it is in an area that you can use should you not be accepted into a health professional school. There are no guarantees of admission into the profession of your choice. Hence, it is of the utmost importance to make plans for your career. The rejected applicant should not limit career options to health-related fields. About one-half of all unsuccessful applicants do not choose an allied health profession as an alternative career. The most important consideration in making this decision is choosing a career that you consider to be rewarding, fulfilling and satisfying. You may discuss this further with your academic advisor or the committee advisor.

V. RESOURCES

Career Development Center

Located in Cleveland Hall 306, the staff here are available to review your personal essay, and offer guidance in the selection of schools. CDC has an extensive resource library and collection of materials about personal statements and essays. Viewbooks and application packets are also found here. Appointments may be required for certain activities. Please call 878-4811.

Test Preparation Courses

For those students who feel a need for a refresher course prior to taking the CAT, DAT, OAT, PCAT exam, you may wish to contact Stanley H. Kaplan Educational Center or Princeton Review. Kaplan and Princeton Review both offer a one-time free trial exam. Visit: www.kaptest.com or www.princetonreview.com for details. Visit the Career Development Center to check for scheduled free practice exams on campus.

Useful Websites

<http://www.buffalostate.edu/offices/cdc/grad.html> BSC Career Development Center
<http://www.aamc.org/> American Association of Medical Colleges
<http://www.aacom.org/> American Association of Colleges of Osteopathic Medicine
<http://www.adea.org/> American Association of Dental Schools
<http://www.aavmc.org/> Veterinary Medicine
<http://www.opted.org/> Optometry
<http://www.cce-usa.org/> Chiropractic
<http://services.aamc.org/postbac/> Postbaccalaureate pre-medical programs
<http://www.howstuffworks.com/becoming-a-doctor.htm> Becoming a Doctor
<http://chemistry.about.com/library/weekly/aa013102a.htm> Interviews and preparation
<http://www.studentdoctor.net> Interviews and preparation
<http://www.wisc.edu/writing/Handbook/apessay.html> Essay help

VI. PRE-HEALTH ADVISEMENT COMMITTEE MEMBERS

The following faculty and staff comprise the Pre-Health Professions Advisement Committee. Any questions you may have should be directed to:

Dr. Gary Pettibone
Biology Department
Science Building 101

Naomi Diaz
C-Step Program
South Wing 220
878-4197

Ms. Jessie Lombardo
Career Development Center
Cleveland Hall 306
878-5811

Dr. Maria Pacheco
Chemistry Department
Science Building 419

Ms. Yanick Jenkins
Director, EOP
Twin Rise South 710

Dr. Michael Zborowski
Psychology Department
Classroom Building C-307

Dr. Chaitali Ghosh
Mathematics Department
Bishop Hall 308

Dr. Theresa Stephan Hains
Weigel Center

Ms. Kelly Boos
Committee Staff Assistant
Classroom Bldg. A-113
878-6674

VII. Pre-Health Career Admissions Tests

**MCAT (Medical College Admissions Test)
Online**

**AAMC
2450 N. Street NW
Washington, DC 20037-0400
(202) 828-0400**

<http://www.aamc.org/students/mcat/start.htm>

Scale: 1 - 15 (per section)

Average: 8

Good scores: 11-13

Low score: 4

4 sections: Verbal Reasoning, Physical Sciences
Biological Sciences and Writing Sample

Good scores on the Writing portion: O - T

DAT (Dental Admissions Test)

Online

**ADA
211 E. Chicago Ave.
Chicago, IL 06011
(312) 440-2500**

<http://www.ada.org/prof/ed/testing/dat/index.asp>

Scale: 1 - 28

Average: 15 - 18

Exam includes: Quantitative Reasoning,
Reading Comprehension, Biology,
General Chemistry, Organic Chemistry,
Survey of Natural Sciences and Perceptual Ability

OAT (Optometry Admissions Test)

**OAT
211 East Chicago Ave.
Suite 1846
Chicago, IL 06011-2678
(312) 440-2693**

See: home.opted.org/asco/

Scores are percentiles based on last year's accepted student scores. 50th percentile is as good as half of the students accepted last year.

Exam includes: Quantitative Reasoning, Reading Comprehension, Total Science, Biology, General Chemistry, Organic Chemistry and Physics

PCAT (Pharmacy College Admissions Test)

**AACP
1426 Prince St.
Alexandria, VA 22314-2841
(703) 739-2330**

<http://www.aacp.org/>

Veterinary Colleges use the MCAT or GRE

**1101 Vermont Ave. NW
Suite 710
Washington, DC 20005
(202) 371-9195**

<http://www.aavmc.org/>

Osteopathic Colleges use the MCAT

**AACOM
5550 Friendship Blvd.
Suite 213
Chevy Chase, MD 20815-7231
(301) 968-4101**

<https://aacomas.aacom.org/>

VIII. General Acceptance Guidelines:

- Medical: 3.5 cumulative GPA

- **Scores of an average of 10 on MCAT sections; no lower than 6 in any one category**
- During the interview process, college admissions committee will check for other qualities of personality, character and commitment.
- Experience in a clinical setting as a volunteer or paid is valuable. Research experience, especially medical or scientific, is also helpful.

- Dental: 3.0 cumulative GPA

- Scores of 15-17 on DAT

- Osteopathy (Medicine - D.O.): 3.2 cumulative GPA

- Scores of an average of 8 on MCAT exam; no lower than 4 in any one category
- An interview with a local D.O. is required by nearly all Osteopathic Colleges

- Podiatry: 3.0 cumulative GPA

- Scores of an average of 6 on MCAT exam
- General acceptance rate is good. Experience in a podiatry clinic will be helpful.

- Chiropractic: 2.5 cumulative GPA

No board exam / open acceptance. An interview with a local chiropractor is generally required.

- Veterinary: 3.5 cumulative GPA - near 4.0 needed

MCAT or GRE required

Experience with a veterinarian is required and it is good to get small and large animal experience.

Cornell University accepts approximately 75 new students each year, and about 35 of these are graduates of a Cornell undergraduate program.

IX. THE PERSONAL INTERVIEW *Very useful website: www.studentdoctor.net/interview-feedback/

You will be evaluated on:

General impression / Appearance / Verbal expression

Nervousness / Confidence in abilities

Volunteer work, or any indication that applicant has realistic expectations based on some personal experience in the field

Research work - any experience?

Prepare for the following questions to be part of the interview:

1. Where did your interest in medicine/dentistry/etc. develop?
(i.e. relatives, contacts, personal experiences)
2. What traits do you bring to the profession? Will you be happy with this career in 10, 20, 30 years?
3. Have you done any volunteer or research work in the field?
4. What are your interests? (health related and other professional, recreational)
5. What will you do if you don't get admitted this year? (i.e. graduate school, work, research)
6. Is there anything you wish to add?

In addition to total GPA and science GPA, be prepared to discuss:

1. Growth patterns with maturity; improving scholarship especially in sciences
2. Full load and personal situations influencing GPA
3. Transfer courses & Science courses taken in summer session
4. Dean's List

XI. PLACEMENT RATES FOR BSC PRE-PROFESSIONAL STUDENTS

At the close of each academic year we are asked to compose an annual report. This report consists of statistics regarding the number of students applying to professional schools, what type of schools, the number of interviews conducted, the number of acceptances or rejections, and various other items of information. We ask your assistance in this information search by keeping the committee secretary informed of your application progress.

We have helped place recent candidates in graduate schools of medicine, osteopathic medicine, dentistry, podiatry, optometry, pharmacy, and chiropractic medicine. We have also helped students transfer into programs of nursing, physical therapy, and several allied health professions. In addition, we have had a number of students who have entered graduate Ph.D. or Master's programs in the health related sciences.

Some of the health professions graduate schools that have accepted our students include: Medical schools: SUNY Buffalo, University of Michigan, University of Pittsburgh, SUNY Health Science Center at Syracuse, SUNY Health Science Center at Brooklyn, McGill, Toronto, San Diego, St. Louis, Albert Einstein, Vermont, New York, Guadalupa; Dental: Stony Brook, Tufts, SUNY Buffalo, University of Maryland, Temple, Harvard, Loyola, Northwestern, Case Western, University of Pennsylvania, Washington University; Osteopathic: New York, Philadelphia, Michigan, New Jersey, Des Moines, Iowa, New England, Kansas City; Podiatry: Chicago, Ohio; Optometry: New York, Pennsylvania, Houston, Memphis, Chicago, New England; Chiropractic: Palmer, NY College of Chiropractic Medicine; Veterinary: Ross University.

<u>2009</u>	1	University of Buffalo
<u>2008</u> -	1	UB School of Pharmacy
	1	University of Medicine and Health Sciences St Kitts
<u>2007</u> -	1	Lake Erie College of Osteopathic Medicine
	2	University of Buffalo
<u>2006</u> -	1	American University of the Caribbean
	1	Accepted at Lake Erie College of Osteopathic Medicine (but decided against it and is pursuing biomedical research instead)
<u>2005</u> -	1	St. George's University Medical School
	1	New York Medical College
	1	University of Buffalo
<u>2004</u> -	1	UB Dental School
	1	UB MD/PhD program
<u>2003</u> -	1	University of Buffalo
	1	Ross University School of Medicine
	1	Southern California University (Acupuncture and Oriental Medicine)
	1	American University of the Caribbean
<u>2002</u> -	1	New York College of Osteopathic Medicine

	1	New York College of Optometry
<u>2001</u> -	1	5 -year program at U.B. Medical School
	1	Philadelphia School of Osteopathic Medicine
	1	Ross University School of Medicine
<u>2000</u>	1	St. George's University Medical School
<u>1999</u> -	1	New York College of Chiropractic Medicine
	1	University of Puerto Rico Medical School
<u>1998</u> -	1	Early Assurance acceptance for U.B. Medical School (Fall 2000)
<u>1997</u> -	6 applicants	
	3 accepted	3 - University of Buffalo Medical
<u>1996</u> -	7 applicants	
	5 accepted	1 - SUNY Stony Brook Medical
		1 - University of Buffalo Medical
		1 - University of Buffalo Dental
		1 - Ohio Osteopathic
		1 - Physician's Assistant Program
<u>1995</u> -	5 applicants	
	1 accepted	1 - University Buffalo Dental
<u>1994</u> -	7 applicants	
	5 accepted	1 - University of Buffalo Medical
		3 - University of Buffalo Dental
		1 - New York Osteopathic
<u>1993</u> -	7 applicants	
	3 accepted	1 - University of Buffalo Medical
		2 - University of Buffalo Dental
<u>1992</u> -	17 applicants	
	5 accepted	1 - University of Buffalo Medical
		1 - University of Michigan Medical
		1 - University of Buffalo Dental
		1 - Ohio Podiatry
		1 - Chicago Optometry
<u>1991</u> -	6 applicants	
	2 accepted	1 - New York Medical
		1 - Ohio Podiatry

* These figures may not be accurate as they are based solely on information received from those students who communicated their success in acceptance.