

So, you are interested in a career in the health professions! Welcome to the Pre-Health (pre-medical) advisement program at Buffalo State College.



With this handbook, I hope you will understand how your degree program, pre-medical pre-requisites and extracurricular activities combine to prepare you for application to any health program.

I will discuss the characteristics of a successful Pre-Health portfolio.

But first things first. You are undertaking a serious and rigorous journey. Grades are important. You can write that down now. Grades are important not only for a strong GPA, but also to demonstrate that you have a thorough understanding of scientific concepts that are important for admissions tests and are foundations of medical education.

You should take advantage of extra-curricular opportunities such as research, shadowing, summer programs or internships. You should have some patient contact experiences – to demonstrate that you have an understanding of the demands placed on health professionals and that you have the demeanor to be a caring health provider. You will need individual letters of recommendation, and you will write many essays. The Pre-Health committee and advisors will guide you through the application process and prepare the committee recommendation for submission with your program application.



Intellectual Foundations and Degree requirements



Pre-requisites for your chosen health profession



Important content courses
Biochemistry for the MCAT
Lifespan development PSY 355
EXE 100 Special Needs

Degree Works

Let's begin. I tell students they have 3 different stacks of pancakes to consume on their journey to a medical career. Your most significant number of pancakes (or undergraduate credits) will be your degree requirements, including 30 credits of general education or Intellectual Foundations. Next will be the pre-requisites for your chosen profession. Health programs do have some common requirements. Finally, there are content courses that are not necessarily required, but may important for an entrance exam (Biochemistry for the MCAT as an example) Other content-rich courses include developmental psychology PSY 355 and EXE 100 Nature and Needs of Individuals with Special Needs.

EXE 100 is a very relevant content course for anyone considering a health profession. It satisfies your Buffalo State diversity general education requirement.

This course is so important for health professionals, because your patients may present with a range of abilities due to physical limitations or psychosocial disorders. Or your formerly healthy patient may be later impaired by accident, illness or stroke.

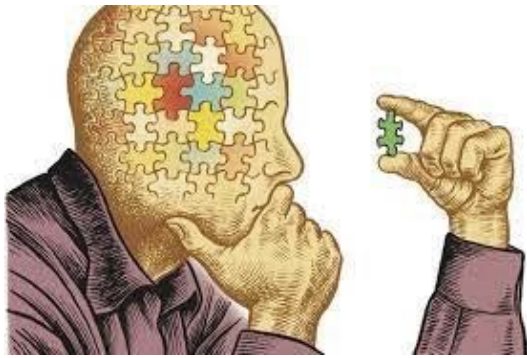


Pre-med is NOT a major course of study. It is simply your stated intention to follow a path toward a health profession. Our Pre-Health program is a supplemental support system to facilitate your admission to health professions programs.

You will receive individual advisement concerning pre-requisite coursework, appropriate extracurricular opportunities like research, summer enrichment programs and patient interaction experiences.

You will continue to be advised by your EOP, first-year or program advisor while meeting with your Pre-Health advisor regularly.

Pre-med is the totality of your undergraduate education and experiences on your journey to a health career.



Motivation

Right now, in your undergraduate classwork you are preparing for the MCAT or other entrance exam by learning content information and cultivating critical thinking.

In everything you study and experience, you are preparing to be a strong applicant to your health program.

Common Pre-Health Requirements

Do NOT take pre-requisites as Pass/Fail.

Do NOT take pre-requisites as Pass/Fail

You should be aware of the sequential nature of the Biology and Chemistry coursework you will need. Not all courses are scheduled each semester, so be sure to check which semester certain courses are offered.

Microbiology is a highly recommended course. The pre-requisites are: [BIO 111](#), [BIO 211](#), [BIO 213](#), [CHE 110](#), [CHE 111](#) ([CHE113](#) lab). You are now prepared for Microbiology: [BIO 316](#).

If your program requires biochemistry, you will need: [BIO 111](#), [BIO 211](#), [CHE 110](#), [CHE 111/113](#), [CHE 112/114](#), [CHE 201/203](#), [CHE 202/204](#). Now you are ready for Biochemistry: [CHE 470](#) (offered fall only).

Before we discuss requirements for medical and osteopathic programs, let's examine the differences between MD (Medical Doctor) and DO (Doctor of Osteopathic Medicine). MD/DO: Both require rigorous study. Both require the MCAT. Both are physicians, both are highly skilled practitioners. Both can train at any residency site.

The difference is the training modality. Osteopathic physicians undertake an additional 200 hours of hands-on manipulative / musculoskeletal practice. The philosophy of osteopathic medicine is a more holistic / whole body healing approach to patient care and illness prevention.

Most osteopathic physicians tend to practice primary care because of this philosophy, but they are eligible to train in any specialty.



MD (Medical Doctor) or DO (Doctor of Osteopathic Medicine)

Medical School (MD and DO) Requirements (by school)



Biology	Foundations of Biology: BIO 111 is a pre-requisite for the BIO courses below Introduction to Cell Biology and Genetics: BIO 211 Introduction to Ecology, Evolution and Behavior: BIO 213 Microbiology: BIO 316
Chemistry	Begin with CHE 110 or MAT 114 then General Chemistry I and II: CHE 111/113 , CHE 112/114 Organic Chemistry I and II: CHE 201/203 , CHE 202/204 Biochemistry: CHE 470 not a medical school pre-requisite, <u>but necessary for the MCAT</u>
Mathematics	Medical pre-requisites by school (including math) Many programs recommend Statistics: MAT 311
Physics	Two courses: PHY 107 / 108 (algebra based) OR PHY 111 / 112 (calculus based)
Not Requirements, but helpful content information for the health professions:	
Psychology	Lifespan Development: PSY 355 (PSY 101 is a pre-requisite)
Diversity:	Nature and Needs of Individuals with Special Needs: EXE 100

You are preparing the [MCAT](#) (Medical College Admissions Test)



Veterinary Programs



So you would rather work with animals! Veterinary programs follow similar pre-requisites to MD and DO programs. Again, begin with Biology 111 and Chemistry 110 and continue the chemistry sequence through Biochemistry. In the Biology curriculum, we suggest BIO 211, 213 and 316.

You will need calculus, statistics, and two courses in Physics.

Veterinary School Requirements

- Biology** Foundations of Biology: [BIO 111](#) is a pre-requisite for the BIO courses below
Introduction to Cell Biology and Genetics: [BIO 211](#)
Introduction to Ecology, Evolution and Behavior: [BIO 213](#)
Genetics: [BIO 303](#)
Microbiology: [BIO 316](#) - Required for veterinary school!
- Chemistry** CHE 110 or MAT 114 can be a pre-requisite for courses below
General Chemistry I and II: [CHE 111/113](#), [CHE 112/114](#) Organic
Chemistry I and II: [CHE 201/203](#), [CHE 202/204](#) Biochemistry:
[CHE 470](#) Required!
- Mathematics** Applied Calculus: [MAT 126](#) ([MAT 114](#) and [MAT 124](#) are pre-requisites)
Statistics: [MAT 311](#)
- Physics** Two courses: [PHY 107](#) / [108](#) (algebra based) **OR** [PHY 111](#) / [112](#) (calculus based)

Most veterinary programs require significant exposure to animal care in a variety of settings

You are preparing for the [GRE](#) (Graduate Record Exam) or the [MCAT](#)



Dental School



Dental school requirements are very similar to MD, DO and veterinary pre-requisites. Again, begin with Biology 111 and Chemistry 110 and continue the chemistry sequence through Biochemistry. In the Biology curriculum, we suggest BIO 211, 213 and 316. You will need Physics I and II. Check your schools for mathematics requirements.

Dental School Requirements

- Biology** Foundations of Biology: [BIO 111](#) is a pre-requisite for the BIO courses below
Introduction to Cell Biology and Genetics: [BIO 211](#)
Introduction to Ecology, Evolution and Behavior [BIO 213](#) Microbiology:
[BIO 316](#)
- Chemistry** CHE 110 or MAT 114 can be a pre-requisite for courses below
General Chemistry I and II: [CHE 111/113](#), [CHE 112/114](#)
Organic Chemistry I and II: [CHE 201/203](#), [CHE 202/204](#)
Biochemistry: [CHE 470](#) Strongly suggested
- Mathematics** [Dental pre-requisites by school \(including math\)](#)
- Physics** Two courses: [PHY 107](#) / [108](#) (algebra based) **OR** [PHY 111](#) / [112](#) (calculus based)
- Other:** [EXE 100](#): Nature and Needs of Individuals with Special Needs would be an appropriate course

You are preparing for the [DAT](#) (Dental Admissions Test)



Pharmacy Programs



For pharmacy, again, begin with Biology 111 and Chemistry 110. Continue the chemistry sequence through Biochemistry Chemistry 470. Is it required for pharmacy programs. You will also need applied calculus and statistics as well as two physics classes. Some programs would like you to have an economics course. For biology coursework, you may note that while BIO 311/312, anatomy and physiology I and II are not pre-requisites for medical school, they are required for pharmacy programs. We suggest BIO 211, BIO 213 and BIO 316.

Pharmacy School Requirements

Biology	Foundations of Biology: BIO 111 is a pre-requisite for the BIO courses below Introduction to Cell Biology and Genetics: BIO 211 Introduction to Ecology, Evolution and Behavior: BIO 213 Anatomy & Physiology I and II: BIO 311 , BIO 312 Required! Microbiology: BIO 316
Chemistry	Suggest MAT 114 as a pre-requisite for courses below since you will need calculus General Chemistry I and II: CHE 111/113 , CHE 112/114 Organic Chemistry I and II: CHE 201/203 , CHE 202/204 Biochemistry: CHE 470 Required!
Mathematics	Applied Calculus I and II: MAT 126 , MAT 127 (MAT 114 and MAT 124 are pre-requisites) Statistics: MAT 311
Physics	Two courses: PHY 107 / 108 (algebra based) OR PHY 111 / 112 (calculus based)
Economics	Introduction to Economics: ECO 101

You are preparing for the [PCAT](#) (Pharmacy College Admissions Test)

Podiatry Programs



Podiatrists are medical specialists who help with problems that affect your feet or lower legs. They can treat sports related injuries as well as complications from ongoing health issues like diabetes.

Very similar requirements to MD, DO, Veterinary programs.

Podiatry Program Pre-requisites

Again, begin with Biology 111 and Chemistry 110 and continue the chemistry sequence through Biochemistry. In the Biology curriculum, we suggest BIO 211, 213 and 316. You will need two physics classes. Check your schools for mathematics requirements.

- Biology** Foundations of Biology: [BIO 111](#) is a pre-requisite for the BIO courses below Introduction to Cell Biology and Genetics: [BIO 211](#)
Introduction to Ecology, Evolution and Behavior: [BIO 213](#)
Microbiology: [BIO 316](#)
- Chemistry** Begin with CHE 110 or MAT 114 then General Chemistry I and II: [CHE 111/113](#), [CHE 112/114](#)
Organic Chemistry I and II: [CHE 201/203](#), [CHE 202/204](#)
Biochemistry: [CHE 470](#) not a medical school pre-requisite, but necessary for the MCAT
- Mathematics** Check with your intended school regarding Calculus
Many programs require Statistics: MAT 311
- Physics** Two courses: [PHY 107 / 108](#) (algebra based) **OR** [PHY 111 / 112](#) (calculus based)

You are preparing the [MCAT](#) (Medical College Admissions Test)

Physician Assistant

Physician Assistants may diagnose illnesses, develop and manage treatment plans, prescribe medications, and may serve as a primary health care provider.

Physician Assistant programs are generally free-standing master's degree programs. As with pharmacy, Anatomy and Physiology I and II are required, in addition to multiple other biology courses; psychology and developmental psychology. You will need at least two courses of general chemistry. Double check if Organic Chemistry or Biochemistry is preferred for your program. Biochemistry has prerequisites of both organic chemistry I and II. Physics is not a prerequisite for most PA schools.



Physician Assistant Requirements

- Biology** Foundations of Biology: [BIO 111](#) is a pre-requisite for the BIO courses below
Introduction to Cell Biology and Genetics: [BIO 211](#) Introduction to Ecology, Evolution and Behavior [BIO 213](#) Anatomy & Physiology I and II: [BIO 311](#), BIO 312 Required! Microbiology: [BIO 316](#)
- Chemistry** CHE 110 or MAT 114 can be a pre-requisite for courses below Chemistry I and II: [CHE 111/113](#), [CHE 112/114](#)
Organic Chemistry I: [CHE 201/203](#) and / or Biochemistry: [CHE 470](#) (**Check your program**)
- Mathematics** Statistics: [MAT 311](#)
- Physics** MAY be required, check with your program ([PHY 107](#) / [108](#))
- Psychology** Introduction to Psychology: [PSY 101](#) Lifespan Development: [PSY 355](#)
Nature and Needs of Individuals with Special Needs: [EXE 100](#) would be an appropriate class

Physician Assistant programs require many hours (500-1000) of patient care (actively working on a patient – nurse, EMT, CNA, phlebotomist) and health care experience (not directly responsible for patient care but may have some patient interaction).

Most students have a bachelor's degree and about 3 years of healthcare experience before entering a PA program.

You are preparing for the [GRE](#) (Graduate Record Exam)

Occupational Therapy (OTD)

Occupation therapy provides intervention and treatment to help patients develop, maintain or recover motor skills necessary for meaningful life activities.

Occupational Therapy programs generally require fewer chemistry courses (if any). Check with your program and begin with Chemistry 110 if necessary. You should begin with BIO 111. You will need Anatomy & Physiology I and II in addition to some general biology courses, introductory physics (1 course), several psychology and social science courses. Kinesiology is required and is available through the health & wellness program (HEW 301) – check for pre-requisites!! The preferred math is statistics. Of course EXE 100 is recommended.

Occupational Therapy Graduate School Requirements

Biology	Foundations of Biology: BIO 111 is a pre-requisite for the BIO courses below Introduction to Cell Biology and Genetics: BIO 211 Anatomy & Physiology I and II: BIO 311 , BIO 312 Required!
Health	Kinesiology: HEW 301 (Check for pre-requisites)
Chemistry	Check with your program. Begin with CHE 110 if necessary
Mathematics	Statistics: MAT 311
Physics	General Physics: PHY 107
Psychology	Introduction to Psychology: PSY 101 Lifespan Development: PSY 355 Abnormal Psychology: PSY 392

Additional recommended courses: Human Origins: ANT 100; Introduction to Sociology: SOC 100;
Nature and Needs of Individuals with Special Needs: [EXE 100](#)



Physical Therapy (DPT – Doctor of Physical Therapy)

Physical therapy focuses on restoring patients' body movement, strength and range of motion.

Graduate programs in Physical Therapy require Anatomy & physiology I and II in addition to other biology, chemistry and physics courses. You should begin with BIO 111 and CHE 110. The math course preferred is statistics. Also required are some social science courses: PSY 101, PSY 355 lifespan development and Sociology 100. Strongly recommended are Exercise physiology (HEW 279) and EXE 100 Nature and Needs of Individuals with special needs.

Physical Therapy Graduate School Requirements

Biology Foundations of Biology: [BIO 111](#) is a pre-requisite for the BIO courses below
Chemistry Introduction to Cell Biology and Genetics: [BIO 211](#) Introduction to Ecology, Evolution and Behavior [BIO 213](#) Anatomy & Physiology I and II: [BIO 311](#), BIO 312 Required!

CHE 110 or MAT 114 can be a pre-requisite for courses below General Chemistry I and II: [CHE 111/113](#), [CHE 112/114](#)

Mathematics Check with your program – suggest Statistics: [MAT 311](#)

Physics General Physics I and II: [PHY 107](#), [PHY 108](#)

Psychology Introduction to Psychology: [PSY 101](#) Lifespan Development: [PSY 355](#)

Other helpful courses: Exercise Physiology: [HEW 304](#) (check for pre-requisites) SOC 100; and [EXE 100](#)

[Link](#) to a chart of PT pre-requisites by program



Optometry Programs

Doctors of Optometry examine, diagnose, treat and manage disorders of the eye.

Optometry Requirements

- Biology:** Foundations of Biology: [BIO 111](#) is a pre-requisite for the BIO courses below: Anatomy & Physiology I and II: [BIO 311](#), BIO 312
Microbiology: [BIO 316](#) ([BIO 211](#), [213](#) and CHE 111/113 are pre-requisites)
- Chemistry:** Suggest MAT 114 as a pre-requisite for courses below, since you will need calculus
General Chemistry I and II (with labs): [CHE 111/113](#), [CHE 112/114](#)
Organic Chemistry I and II (with labs): [CHE 201 /203](#), [CHE 202/204](#) Biochemistry: [CHE 470](#) - check the Optometry website for substitutions
- Mathematics** Applied Calculus: [MAT 126](#) ([MAT 114](#) and [MAT 124](#) are pre-requisites)
Statistics: MAT 311
- Physics** Physics 108 and 108
- Psychology** Psychology 101

Shadowing is strongly recommended if not required.

You are preparing for the [OAT](#) (Optometry Admissions Test).

Some programs will accept other health profession entrance exams. Check with your preferred schools.



Accelerated Bachelor of Science in Nursing

If you want to complete your liberal arts degree at Buffalo State College, but are interested in a career in nursing, you can prepare for an Accelerated Bachelor of Nursing Program. Accelerated Bachelors Programs in Nursing are designed for students who have already completed a bachelor's degree from an accredited college or university in any discipline. The programs vary in length from 12-18 months. Pre-requisites vary among programs, but these are the most common:

Biology	Foundations of Biology: BIO 111 is a pre-requisite for the BIO courses below: Anatomy & Physiology I and II: BIO 311 , BIO 312 Required! Microbiology: BIO 316 (BIO 211 , 213 and CHE111/113 are pre-requisites)
Chemistry	CHE 110 or MAT 114 can be a pre-requisite for course below General Chemistry I: CHE 111/113
Mathematics	Statistics: MAT 311
Nutrition	NFS 102
Psychology	Introduction to Psychology: PSY 101 and Lifespan Development: PSY 355

Chiropractic Programs

Chiropractic is a licensed health care profession that emphasizes the body's ability to heal itself. Treatment typically involves manual therapy, often including spinal manipulation. Other forms of treatment, such as exercise and nutritional counseling, may be used as well. Chiropractors often treat problems related to the musculoskeletal system.

While there is some variation between the institutions, the core chiropractic degree prerequisites are very similar. A minimum of 24 credit hours in life and physical sciences including Biology, Physics, general chemistry and organic chemistry. Of those 24 credits, 12 must include a significant laboratory component. Biochemistry and Anatomy & Physiology courses are recommended, but not required.



Application Services

[AMCAS](#) (Medical School)

[AACOMAS](#) (Osteopathic Programs)

[AACPMAS](#) (Podiatry Programs)

[ADEA AADSAS](#) (Dental School)

[CASPA](#) (Physician Assistant)

[OPTOMCAS](#) (Optometry)

[OTCAS](#) (Occupational Therapy)

[PHARMCAS](#) (Pharmacy)

[PTCAS](#) (Physical Therapy)

[VMCAS](#) (Veterinary Programs)

Characteristics of a Successful Application

<https://students-residents.aamc.org/applying-medical-school/how-medical-schools-review-applications>

Strong grades and MCAT score: “Many schools look for students who demonstrate an ability to handle challenging coursework. It is important for applicants to show that they’ve done well in upper-level science courses, and ‘doing well on the MCAT® exam shows that you can handle medical school coursework.’”

However, “Outstanding grades and MCAT scores do not guarantee that an applicant will be invited to interview. Just as important are extracurricular activities and life experiences, essays and personal comments in AMCAS, and letters of recommendation.”

Personal initiative: “Such initiative may take the form of leadership, creativity, research, community service, motivation, or other life experiences.”

Personal qualities: “Schools also look for evidence that an applicant has demonstrated good judgment, compassion, and selflessness— qualities every physician should embody. Applicants can show evidence through their involvement in extracurricular activities, letters of evaluation, and their personal statement.”

Motivation: “Each applicant needs to be as sure as possible that this is what they want to do with their life. That motivation can be demonstrated through academic achievement and also through exposure to clinical medicine and community service.”

Your Grades

Strong grades are important, especially in pre-requisite coursework. Strong grades demonstrate that you have a thorough understanding of concepts you will face in your health education. Pre-requisites should not be taken Pass/Fail. Almost every student has a difficult semester, especially at first. Withdrawing from an occasional course will not harm your chances of admission and a W is better than a D, E or F. Consult with your advisor and the financial aid office before withdrawing from a class. Be aware of deadlines for drop/add and course withdrawal. Medical schools will average letter grades in repeated science coursework to determine a science GPA.

Admissions committees also look at trends in your grades, thus a strong finish in upper-level coursework is beneficial. You should aim for an overall GPA of 3.5-3.7/4.0.

The Admissions Tests

Do not rush the test preparation process! Most students who do well on the MCAT (or other admissions exams) spend between 200 to 300 hours preparing for the exam. Successful test taking is a skill you will need throughout medical school and other professions that require licensing. Talk to your Pre-Health advisor about possible test preparation materials. You are aiming for a score of 510 or above.

MCAT: <https://students-residents.aamc.org/applying-medical-school/taking-mcat-exam/>

DAT: <http://www.ada.org/en/education-careers/dental-admission-test>

GRE: <https://www.ets.org/gre>

OAT: <https://optometriceducation.org/students-future-students/>

PCAT: <https://www.pearsonassessments.com/graduate-admissions/pcat/about.html>

Free practice tests can be found on many sites. Here are some MCAT examples:

<https://www.princetonreview.com/medical/free-mcat-practice-test#!practice>

<https://www.test-guide.com/free-mcat-practice-tests.html>

<https://www.mcat-prep.com/mcat-practice-tests/>

https://www.testprepreview.com/mcat_practice.htm

<https://www.khanacademy.org/test-prep/mcat>

Extra-Curricular Experiences

Work and activity statements AMCAS Section 5. You may enter up to 15 experiences
Identify 3 of the experiences as most meaningful and why

Research, shadowing, summer enrichment programs and the like identify you are a well-rounded applicant.

Clinical exposure and patient interaction experiences in hospital, nursing home, rehabilitation facility or clinical settings illustrate your knowledge of the profession and your demeanor to be a caring practitioner.

Socially relevant activities such as work with homeless shelters, soup kitchens, food pantries or with church groups demonstrate a sincere connection to humankind.

Do not engage in volunteer, leadership or mentoring positions simply to pad your resume.

[Undergraduate Research at Buffalo State;](#)

[Summer Research at Buffalo State;](#)

[CLIMB UP at University at Buffalo Summer Program](#)

[SUNY Pre-OP for EOP sophomores and juniors Summer Health Professions Education Program \(SHPEP\) Facilities that offer summer internships or programs](#)

[Kaleida Health volunteer form](#)

[Catholic Health volunteer form](#)

Your Personal Statement / Essays

Primary essay for the AMCAS Section 8
5,300 characters, including spaces

In the case of medical school, you will write many essays! Your primary essay (AMCAS Section 8) is your most significant chance to speak in your own voice during the initial application process. This is NOT the place to list all your activities, work and experiences. (That is Section 5 of AMCAS) You should have a compelling rationale for your motivation to attend medical school. You are telling a story that demonstrates the qualities and competencies medical schools seek in their students. You may be reflecting on lessons learned from your experiences. Do not panic if you do not yet have that “Call me Ishmael” moment. Pick some themes and elaborate. Seek help from the [Writing Center](#), [Career Development Center](#) or your advisor. Always spellcheck, grammar check and have an advisor or mentor review your essays! Expect multiple revisions!

Secondary Application Essays and Essays for Special Circumstances

You will write different essays for [secondary applications](#) to individual schools. Follow their instructions carefully. You may write essays to explain special circumstances or disadvantaged status.

<https://www.shemmassianconsulting.com/blog/medical-school-personal-statement-analysis>



Letters of Recommendation

<https://www.shemmassianconsulting.com/blog/medical-school-letter-of-recommendation>

Identify your recommenders: Establish a rapport with faculty, mentors or volunteer supervisors early. Choose recommenders who know you as a person. Ask for letters from those who can write about your specific traits such as your laboratory skills, unique contributions to a class or research project or diligence, dependability or compassion in a volunteer setting.

How to ask for a recommendation: Give them plenty of notice! To help your recommender write an effective letter, give them a copy of your transcript (unofficial), your resume and personal statement. In addition to commenting on your academics, ask them to highlight some of the [core competencies](#) you possess: thinking and reasoning, intrapersonal competencies, science competencies and interpersonal skills.

Be cognizant of deadlines and allow time for your recommender to write an effective letter.

[Waiving your right to access the recommendation letters](#)

[Buffalo State LOR Request Form](#) (PDF)

Committee Recommendation

The Pre-Health committee at Buffalo State assists students with assembling a comprehensive file and evaluative packet of letters of reference for admission to professional health schools.

Deadlines are crucial!

Your file will include your unofficial transcript (DegreeWorks), your personal statement, your resume of employment and all extra-curricular activities, your letters of recommendation (sent directly to the Pre-Health Staff Associate, with the signed LOR request form) and your official MCAT or other admission test score.

Committee interviews are conducted as a dress rehearsal for you and for the committee identify personal traits to be included in the committee recommendation. [Common interview questions](#) [Preparing for the interview](#)

The Pre-Health Committee meets and subsequently evaluates each applicant by viewing the student's entire file. A committee letter will result from this meeting and will be the cover letter to all the individual letters of recommendation when sent to the professional schools of your choosing. Your committee letter contains information on both your academic and personal qualifications.

Committee review can take several weeks. Prepare your materials early!

Alternatives / Options

While many, many first-year students express a desire to attend medical / pharmacy / dental / veterinary school or other professional health program, not everyone will fulfill all the requirements for such programs:

- strong grades in pre-requisite coursework
- appropriate extra-curricular programs and experiences
- scoring well on admissions tests
- completing the arduous application process

Remember this is a rigorous and challenging journey. If a roadblock arises, early intervention can guide students to tutoring or alternate programs. [Career Development Center](#)

Happily, many students who thought medical school was their only future have found successful careers in nursing, occupational therapy, athletic trainer and other [allied health professions](#).

[Non-clinical careers](#) also include: [child life specialist](#), [art therapy](#), [patient advocate](#)

Record enhancers like [Master's in Public Health](#) or [Postbaccalaureate](#) programs may be good options.

With advisement, some students change career paths entirely. A student wanted to be a medical doctor and open a clinic in Ghana. After a setback in science and exploring her strengths and interests, she realized she did not need to be a doctor to open a clinic. She graduated with honors with a degree in International Relations. She enjoyed a study abroad experience and is currently in the Peace Corps. Because of her knowledge, skills and experiences, she can go to Ghana, hire a doctor, and open her clinic in a different capacity. We are here to help you.

Pre-Health Advisement Committee

Pre-Health Advisory Committee Membership 2021-2023:

Kelly Boos, Staff Associate, Advisor and Program Manager SAMC 332, booskg@buffalostate.edu (716) 878-6674

Kimberly Bagley, Ph.D. Chair and Professor Department of Chemistry

Carol DeNysschen, Ph.D. Chair and Professor Department of Health, Nutrition and Dietetics

Kelly Frothingham, Ph.D. Ex-officio, Associate Dean, School of Arts & Sciences

Olga Novikova, Ph.D. Assistant Professor of Biology

Leah Panek-Shirley, Ph.D. Assistant Professor of Health, Nutrition and Dietetics

Daniel Potts, Ph.D. Committee Convener, Chair and Professor, Department of Biology

Sujit Suwal, Ph.D. Assistant Professor of Chemistry

Gregory Wadsworth, Ph.D. Associate Professor of Biology