

Master of Science

Biomedical Sciences - Medical Masters (MS)

The Macon & Joan Brock Virginia Health Sciences at Old Dominion University Biomedical Sciences - Medical One Year Program

The VHS Biomedical Sciences - Medical Program is a one-year pre-professional (postbaccalaureate) master's degree program designed for students who wish to matriculate into medical school.

The curriculum, which mainly consists of medical school courses taken with first year medical students, also has a medical preparation course aimed at improving students' interview skills and knowledge about other players in the healthcare field with whom they would interact as a physician.

The program provides an opportunity for highly motivated students to improve their academic credentials by demonstrating their academic abilities in a rigorous medical school environment. For this reason, it is particularly suitable to help students make themselves more competitive applicants to allopathic and osteopathic medical programs.

Goals and Objectives

It is the goal of the Biomedical Sciences - Medical One Year Program that every student successfully completes the program to become more academically competitive and an overall better candidate for admission to the professional school of his/her choice.

To accomplish this goal, the program has established the following objectives:

- Offer four first-year medical school courses within the Biomedical Sciences - Medical Program curriculum to create a challenging academic environment.
- Enhance student interviewing skills through the use of mock interviews with accompanying feedback.
- Initiate patient exposure through Standardized Patient experiences.
- Advise students individually and in small groups based on student ability and intention.

Transferability of Credit

No courses may be transferred for credit leading to the Biomedical Sciences - Medical Degree.

Admission

- A bachelor's degree from a regionally accredited institution in the U.S. or Canada prior to matriculating at VHS. Official transcripts from the awarding institution must indicate the date the degree was conferred.
- Successfully completed each of the following medical school prerequisite courses:
 - Two semesters or three quarters of physics with labs
 - Two semesters or three quarters of organic chemistry/biochemistry with labs
 - Two semesters or three quarters of chemistry with labs
 - Two semesters or three quarters of biology with labs

*Study abroad coursework is **not** accepted to fulfill prerequisite requirements.*

- A cumulative grade point average of 2.75 (B-) or better.
- Medical College Admission Test (MCAT) for students pursuing medical school
 - One-year program: MCAT with a **minimum score of 503**.
 - Two-year program: MCAT with a **minimum score of 496**.

We **do not** accept GRE scores in place of MCAT scores.

- Clinical experiences with patient contact (including scribing, shadowing, hospice, EMT)
 - At least 100 hours
- Volunteerism (clinical or not)
 - At least 100 hours

Applicants must be U.S. citizens or U.S. permanent residents.

Applicants from rural or other underserved regions and those who have been disadvantaged or underrepresented for economic, racial or social reasons, and who possess the motivation and aptitude required for the study of medicine, are strongly encouraged to apply.

All courses to fulfill the degree requirements for the Biomedical Sciences - Medical Program must be taken at Macon & Joan Brock Virginia Health Sciences at Old Dominion University. No credit will be given for courses taken at another institution.

Since we have a **rolling admissions process**, applicants are encouraged to **apply early** and submit all of their application materials as they become available, even when planning to take the MCAT at a later date.

Technical Standards

The abilities and skills candidates and students must possess in order to complete the education and training of the Biomedical Sciences Medical Master's Program are referred to as "Technical Standards." These abilities and skills are essential for entry into most professional practice settings associated with this degree program.

1.0 Observation Skills Technical Standard

1.01 Demonstrate sufficient attention and accuracy in observation skills (visual, auditory, and tactile) in the lecture hall, laboratory and/or online settings.

1.02 Indicators include, but are not limited to, this example:

- a. Accurate visualization and discrimination of text, numbers, patterns, graphic illustrations, and other imaging texts.

2.0 Communication Skills Technical Standard

2.01 Demonstrate effective communication skills with healthcare professionals, and with people of varying cultures, ethnicities and personalities.

2.02 Indicators include, but are not limited to, these examples:

- a. Clear, efficient and intelligible articulation of spoken English language.
- b. Legible, efficient and intelligible written English language.
- c. Accurate and efficient English language reading skills.
- d. Accurate and efficient expressive and receptive communication skills.
- e. Ability to accurately follow oral and written directions.

3.0 Critical Reasoning Skills Technical Standard

3.01 Demonstrate critical reasoning skills, including, but not limited to, intellectual, conceptual, integrative and quantitative abilities.

3.02 Indicators include, but are not limited to, these examples:

- a. Demonstrate ability to measure, calculate, reason, analyze, integrate and synthesize information.
- b. Demonstrate ability to acquire, retain and apply new and learned information.

4.0 Motor and Sensory Function Technical Standard

4.01 Perform demonstrations and experiments in the basic sciences.

4.02 Observe a patient accurately, both at a distance and close at hand; this ability requires the functional use of vision and somatic sensation.

4.03 Speak, hear, and observe patients in order to elicit information, describe changes in mood, activity, and posture, and perceive nonverbal communications.

4.04 Communicate effectively and efficiently in oral and written form.

4.05 Execute movements reasonably required to provide patients with general care and emergency treatment.

4.06 Students should also have sufficient motor function to elicit information from patients by palpation, auscultation, percussion and other diagnostic techniques.

4.07 The ability to solve problems, a skill which is critical to the practice of medicine, requires the intellectual abilities of measurement, calculation, reasoning, analysis and synthesis. In addition, a student must possess the emotional health required for full utilization of his or her intellectual abilities, the exercise of good judgment, the prompt completion of all responsibilities required for the diagnosis and care of patients, and the development of mature, sensitive, and effective relationships with patients.

4.08 All students of medicine must possess the intellectual, ethical, physical, and emotional capabilities required to undertake the full curriculum and to achieve the levels of competence required by the faculty.

5.0 Behavioral and Social Attributes Technical Standard

5.01 Demonstrate the behavioral and social attributes vital to participation in a professional program and service as a practicing laboratory professional.

5.02 Indicators include, but are not limited to, these examples:

- Possess the emotional health required for full utilization of mental faculties (judgment, orientation, affect, and cognition).
- Ability to develop mature and effective professional relationships with faculty, patients, the public, and other members of the healthcare team.
- Possess personal qualities that facilitate effective therapeutic interactions (compassion, empathy, integrity, honesty, benevolence, confidentiality).
- Demonstrate impartial motives, attitudes, and values in roles, functions, and relationships.
- Ability to monitor and react appropriately to one's own emotional needs and responses.
- Display appropriate flexibility and adaptability in the face of stress or uncertainty associated with laboratory experiments.
- Compliance with standards, policies, and practices set forth in the institutional student handbook and the program handbook.

Curriculum Requirements

Unique to our Two-Year Program

The Biomedical Sciences - Medical Program is a two-year pre-professional (post-baccalaureate) master's degree program designed for students who wish to matriculate into medical school.

The curriculum, which mainly consists of medical school courses taken with first year medical students, also contains the following courses: Medical School Preparation 1.0, 1.5 and 2.0, Principles of Epidemiology, MCAT Preparation, Legal and Ethical Issues in Medicine and Social and Behavioral Sciences for Public Health.

The program provides an opportunity for highly motivated students to improve their academic credentials by demonstrating their academic abilities in a rigorous medical school environment. For this reason, it is particularly suitable to help students make themselves more competitive applicants to allopathic and osteopathic medical programs as well as dental and other health professions programs.

Goals and Objectives

It is the goal of the Biomedical Sciences - Medical Two-Year Program that every student successfully completes the program to become more academically competitive and an overall better candidate for admission to the professional school of his/her choice.

To accomplish this goal, the program has established the following objectives:

- Offer four first-year medical school courses within the Biomedical Sciences - Medical Program curriculum to create a challenging academic environment.
- Enhance student interviewing skills through the use of mock interviews with accompanying feedback.
- Initiate patient exposure through Standardized Patient experiences.
- Advise students individually and in small groups based on student ability and intention.
- Provide MCAT preparation to improve MCAT scores and improve students' competitiveness for medical school.

Transferability of Credit

No courses may be transferred for credit leading to the Biomedical Sciences - Medical Degree.

Note

Students must complete both years of the program to be eligible to matriculate into EVMS.

One-year program

Term 1		20
BM 519	Medical School Preparation 2.0	
BM 501	Foundations of Disease	
BM 536	Human Structure	
Term 2		12
BM 502	Introduction to Organ Systems	
BM 503	Hormones	
Total Credit Hours		32

Two-year program

Term 1		12
BM 524	Medical School Preparation 1.0	
BM 530	Foundational Science II	
MPH 611	Social and Behavioral Sciences for Public Health	
Term 2		10
BM 525	Medical School Preparation 1.5	
BM 534	MCAT Preparation	
MPAS 604	Legal & Ethical Issues in Medicine	
MPHO 614	Principles of Epidemiology	
Term 3		20
BM 501	Foundations of Disease	
BM 519	Medical School Preparation 2.0	
BM 536	Human Structure	
Term 4		12
BM 502	Introduction to Organ Systems	
BM 503	Hormones	
Total Credit Hours		54