Program Description and Objectives
Post baccalaureate students often encounter a “gap year” prior to applying to medical school. Often they need additional coursework and advising to enhance their application and make them more competitive in the selection process. Once they matriculate into medical school, students often struggle with their first year of medical school didactics and wish they had taken key premedical courses beforehand. For these reasons, we are offering a new concentration in Medical Sciences as an alternative to the more traditional non-thesis Masters in Biology track. This option focuses on 1) mastery of specific premedical coursework that simulates first year medical school courses, 2) advisement with the medical school application process, and 3) a capstone course that focuses on internships and scientific writing skills.

The Master of Biology Medical Sciences Program (MBMS) consists of 40 credit hours of relevant courses that teach concepts and skills central to the practice of medicine. Many of the courses are taught using case-based or problem-based instruction methods. Medical schools are adopting case-based instruction methods; therefore, students who complete the MBMS program will have been exposed to this teaching format. Courses selected in the MBMS program are consistent with other Master’s premedical programs offered at other institutions throughout the United States. The main goal of the MBMS is to prepare graduates for future academic programs in Medicine, Pharmacy, Physician Assistant, Anesthesiology Assistant, Dentistry, or Medical Education. By completing the curriculum selected for this degree program, students will be more prepared for their first and second years of medical school and will receive helpful advising as they make important decisions about their future in healthcare. Demonstrating success in these courses would further strengthen the credentials of the candidate possibly giving them an advantage over students who only take the minimum required courses set by various medical programs.

Complete Program Curriculum (i.e. catalog copy)
Masters in Biology, Medical Studies concentration

The MBMS Program is designed to provide advanced medical instruction to students at GSU. The Master’s Program consists of three required courses, a choice of electives, and one capstone course for a total of 40 credit hours.

Degree Requirements (40 hours)

1. Required Prerequisite Courses. The credit hours in this section will not count toward the Master’s Degree. The student MUST take the following prerequisite courses, or have taken equivalent courses at the undergraduate level and received a grade no lower than a B in the following:
   - Biol 7800 Cell Molecular Biology (3)
   - Biol 7240 Applied Medical Physiology (3)
   - Biol 7250 Human Physiology Lab (1)
2. Required courses (2 CH)

- Biol 8700 Graduate Seminar (2CH)

3. Science Elective Courses (28 hours). The student must complete 28 CH of the following courses with a grade no lower than a B:

- Biol 6687 Surgical Anatomy (4)*
- Biol 6246 Advanced Human Physiology (4)
- Biol 6428 Medical Microbiology (4)
- Biol 6115 Medical Neurobiology (4)
- Biol 6102 Neurobiology (4)
- Biol 6278 Immunology (4)
- Biol 6074 Developmental Biology (4)
- Biol 6240 Endocrinology (4)
- Biol 6686 Pathophysiology (4)
- Biol 6685 Functional Histology (4)
- Biol 6282 Tumor Immunology (4)
- Biol 6284 Medical Biochemistry (4)
- Biol 6248 Cell Physiology (4)
- Chem 6610 Biochemistry II (4)
- Biol 6800 Advanced Cell Biology (4)
- Biol 6241 Hormones and Behavior (4)
- Biol 6500 Human Genetics (4)
- Biol 6580 Microbial Pathogenesis (4)
- Bio 6545 Bioethics (4)

*Physician’s Assistant Admissions require 4 credit hours of a physiology and lab course and 4 credit hours of an anatomy course/lab. Biol 7240/7250 and Biol 6687 Surgical Anatomy would meet these requirements. Check with your institution to verify prerequisite requirements as these may differ.

4. Additional Elective Courses (6 hours) Choose from the following:

- GERO 8102 Life Course Sociology (3)
- GERO 7200 Health and the Older Adult (3)
- GERO 8320 Psychology of Aging (3)
- PH 7011 Intro to Epidemiology (3)
- Biol 7021 Infectious Disease and Society (3)
- HA 8160 Intro to Health Care System (3)
- HA 8190 Health Policy & Ethics (3)
- NUTR 6700 Med Biochem Principles (3)
- Biol 6744 Biostatistics or PH 7017 Fundamentals of Biostatistics (3)
- SNHP 6010 Medical Terminology (3) online course

5. Capstone Courses (choose 4 hours)

- Biol 8888 Non-thesis Masters Research project (4 CH)
- Biol 6916 Clinical Internship (4 CH) * this course has a prerequisite of Biol 6687 and Biol 6686.
Financial Aid: Title IV Financial Aid provides assistance in the form of Work Study. Students may obtain assistance via teaching which builds leadership skills. Teaching does not count toward tuition waiver or course credit, however. Contact the advisors if interested in this option.

Process for admitting students to the program

The Biology Department’s Premed Advisors, in consultation with Biology Department’s MS Admissions Committee and Director of Graduate Studies, will manage admission into the MBMS program and the certification of its successful completion. Deadlines for graduate applications for Fall and Spring semesters are June 1 and October 1, respectively. Guidelines are posted on http://biology.gsu.edu/admissions-guidelines where candidates can also apply online.

Declaration of concentration in Medical Science

A minimum GPA of 3.0
A minimum GRE score in the 40th percentile in all three categories, or a minimum MCAT score of 470.
Candidates will be admitted competitively on the basis of the following criteria:
Transcripts of past academic performances
Statement of Purpose
TOEFL/IELTS scores (International Students only)
Completion of all of the premed prerequisites scoring a grade no lower than a B:
Biol 2107, 2108, Physics 1111 and 1112, Chem 1211, 1212, 3100, 3110, 3410, and 4600.
At least three letters of recommendation.
A completed online application.

Advisement process and resources for students in the program

The Biology Premedical Advisors will be the academic advisors for students in the program. They will act in consultation with the Graduate Office and College of Arts and Sciences Premedical Advisory Committees. Medical school application advisement would also be offered through the existing Advisory Committee in the Office of Academic Assistance (OAA) and review of the Master’s premedical applicants would be done by the Biology Premedical Advisors.