

# PRE-MEDICAL SCIENCES

**Mark A. Pershouse, Director and Associate Professor**

Health care continues to be one of the most rapidly expanding areas of our society. Careers in the health professions have expanded both in numbers and in the variety of opportunities. The rewards of a career in health care include excellent salaries, stability of employment, geographic mobility, and the opportunity to help other people. The Pre-Medical Sciences Program is an inclusive, non-judgmental advising program that helps students become well-informed, well-prepared applicants to programs in allopathic medicine, osteopathic medicine, chiropractic medicine, dentistry, naturopathic medicine, optometry, physician assistant studies, podiatry, and veterinary medicine.

## PreMed Intake Path

For students interested in pursuing a career in the health professions, the University of Montana has begun a new PreMed Intake Path. This one-year long major is designed to expose students to the academic rigor associated with science courses at UM and to expose the students to the breadth of career opportunities in the health professions without causing the student to lose ground on other students in the discipline.

During the first year and beginning at UM's Fall Orientation and/or Bear Tracks, students are advised through a combination of a Freshman PreMed advisor (Mark Pershouse or Jason Granvold) and their academic advisor and recommended attendance in a weekly two-hour course, HMED 140 - Introduction to Health Professions. This course covers the selection of a major, introduces the students to a wide variety of health care careers, and begins to teach the skills required to apply successfully to health professions schools. Once a major is selected (before the end of the first year, ideally), students will be assigned a major-specific advisor to assist them in preparation for their chosen health care path. This advisor typically is in addition to their academic advisor for the major.

Students are encouraged to meet with the Health Professions advisor each semester to continue with the health professional school pre-requisite academic plan and to prepare for a competitive application.

### Fall

Code	Title	Hours
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	5
BIOB 160N & BIOB 161N	Principles of Living Systems and Principles of Living Systems Lab	4
HMED 140	Introduction to Health Professions	2
<b>One of the following courses:</b>		<b>3-4</b>
WRIT 101	College Writing I	
M 121	College Algebra	
M 151	Precalculus	
M 162	Applied Calculus	
or another General Education Course		
<b>Total Hours</b>		<b>14-15</b>

Spring

Code	Title	Hours
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	5

BIOB 170N & BIOB 171N	Principles of Biological Diversity and Principles of Biological Diversity Lab	5
<b>One of the following courses:</b>		<b>3-4</b>
WRIT 101	College Writing I	
M 121	College Algebra	
M 151	Precalculus	
M 162	Applied Calculus	
<b>A General Education Course</b>		<b>3</b>
<b>Total Hours</b>		<b>16-17</b>

Pre-Medical Sciences is not a major at the University of Montana. The Pre-Medical coursework will help students to gain admission to a professional school or program while completing a degree in a field of study. Students may select any major as a field of study, but specific pre-professional courses must be completed. When selecting a major, remember that a science major is not required for admissions into professional schools. It is more important to perform well in your chosen major. Professional schools are most concerned with the overall quality, scope, and difficulty of undergraduate work rather than the major.

Pre-professional courses are designed to provide a strong foundation in the sciences, highly developed communication skills, and a solid background in the social sciences and humanities. Curriculum guides outlining minimal course requirements established by professional schools are available from the Pre-medical Sciences office and from the Pre-Medical Sciences website (<http://umt.edu/premed> (<http://health.umt.edu/premed/>)). Because many majors within the sciences, social sciences, and humanities can provide strong preparation for medical school, the Pre-Medical Sciences Advising Program gives students the opportunity to interact with advisors from diverse disciplines in addition to their advisor for their major.

The minimal requirements for professional school should be completed prior to graduation and prior to taking the admission test required by professional schools. Since specific subject requirements vary among institutions, students should discuss their academic plans with their Pre-Medical Sciences advisor.

Admission to a professional school is very competitive. Students must maintain a high grade-point average in college if they expect to be admitted, even though many schools are changing to a more holistic approach to admissions. All required courses must be taken for letter grades. In addition, the applicant must score well on the appropriate professional admissions test. These tests are designed to measure basic academic ability in the natural sciences, reading ability, and problem solving skills.

Besides academic accomplishments and admission exam scores, acceptance by a professional school is also dependent upon letters of recommendation, volunteer experience, job shadowing, undergraduate research, and personal interviews conducted by the professional school. It is important that students consult with a Pre-Medical Sciences advisor and with an academic advisor in their major each year to make sure that they can satisfy the necessary requirements for graduation within the time available. The Pre-Medical Sciences Director will also discuss procedures, advise, and assist the student during the process of applying to a professional school.

## High School Preparation

High school students contemplating a career in the health professions should have three to four years of mathematics, courses in chemistry and physics and a solid background in literature and social science.