

Post Baccalaureate Certificate in Pre-Medicine

Program Location: Culbertson Hall 318, 320, 324, 328, and 330

Bozeman, MT 59717

Home Page for HP (<http://www.montana.edu/hpa/>)**RC** (<https://www.montana.edu/hpa/>)

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The *Post Baccalaureate Pre-Medical Certificate Program* is a career-changing opportunity afforded to students by Montana State University through the Health Professions Resource Center office. As a 'career-changing' program, students accepted into this program have earned a non-science bachelor's degree and have often been employed prior to deciding to pursue a career in medicine or health care. The *Certificate* program was approved in 2005 as a 'career-changing' program and the first students matriculated in May 2006.

The program is about 12-15 months (~4 semesters) in length when enrolled in classes full-time (12 credits or more per semester) and when it is started in the summer. Students are encouraged to begin during summer session but can start during any academic semester.

Certificate of Completion

Certificate of Completion is awarded to students who complete a minimum of 30 credits to fulfill the certificate curriculum requirements and at least 20 of those credits at Montana State University.

To graduate, students will declare the certificate curriculum as their course of study, meet with their advisor and apply to graduate the semester prior to finishing. Students will need to pay the fees (<https://catalog.montana.edu/graduate/policiestext-fees-and-holds/#graduation>) associated with graduation.

How to Apply

1. Application for the Post Baccalaureate Pre-Medical Certificate can be found online through MSU Undergraduate Admissions (<https://www.msuadmissions.org/application/>).
2. Competency in math, as defined by MSU Math Level 4 or successful completion of College Algebra within the last 5 years, is highly recommend at the time of course registration and matriculation. Courses in Chemistry, Statistics, and Math require this as a pre-requisite. Therefore, students without this level of math will need additional semesters before beginning the required curriculum. It is also recommended that you have 2 semesters of college writing prior to beginning the program.

Program Specifics

While at MSU students complete professional school pre-requisites and prepare for a competitive application.

- Curriculum typically consists of 1 year each of biology, general chemistry, organic chemistry, physics and a semester of biochemistry. Additional courses such as statistics, calculus, psychology, and sociology may be recommended depending on undergraduate coursework completed. Curriculum is established based on students educational goals and professional program course pre-requisites.
- Courses are taken at the undergraduate level and with the undergraduate students.

- Students are encouraged to participate in a semester-long application preparation process (Prep2Apply).

Students can apply to professional school at the end of the *Certificate* program and; therefore, experience at least one glide year. We encourage students to consider the 1-year Master of Science in Health Sciences (<http://catalog.montana.edu/graduate/interdisciplinary-other-programs/ms-health-sciences/>) program during the glide year to further enhance their academic foundation prior to professional school matriculation.

Program Learning Outcomes

- Design and create an academic plan to fulfill educational requirements for health professional school applications that also fulfills the requirements of the certificate program.
- Develop and apply effective communication strategies for a variety of environments and people.
- Relate fundamental science, math, and social science class knowledge to understand health and medicine.

Curriculum Requirements:

Required Courses

CHMY 141 & CHMY 142	College Chemistry I and College Chemistry I Lab	4
CHMY 143 & CHMY 144	College Chemistry II and College Chemistry II Lab	4
Take 7 credits from this list:		7
BIOB 410	Immunology	
BIOB 160	Principles of Living Systems	
BIOB 260	Cellular and Molecular Biology	
BIOB 375	General Genetics	
BIOM 250	Microbiology for Health Sciences: Infectious Diseases	
BIOM 251	Microbiology for Health Sciences Lab	
BIOM 360	General Microbiology	
BIOH 320	Biomedical Genetics	
Electives - Take 15 credits from this list:		15
BIOH 201	Human Anatomy and Physiology I	
BIOH 211	Human Anatomy and Physiology II	
BIOH 303	Global Diseases and Health Disparities	
BIOH 409	Advanced Human Torso Anatomy	
BIOH 411	Advanced Human Appendicular Anatomy	
BIOH 423	Human Developmental Biology	
CHMY 211	Elements of Organic Chemistry	
AHMS 144	Medical Terminology	
PHSX 220	Physics I with Calculus	
PHSX 221	Physics I with Calculus Laboratory	
PHSX 222	Physics II with Calculus	
CHMY 212	Elements of Organic Chemistry Lab	
CHMY 321	Organic Chemistry I	
CHMY 322	Organic Chemistry I Lab	
CHMY 323	Organic Chemistry II	
CHMY 324	Organic Chemistry II Lab	
BCH 380	Biochemistry	
BCH 381	Biochemistry Lab	
BCH 441	Biochemistry of Macromolecules	

BCH 442	Metabolic Regulation
STAT 216Q	Introduction to Statistics
PHSX 205	College Physics I
PHSX 207	College Physics II
PSYX 230	Developmental Psychology
PSYX 333	Psychology of Aging
PSYX 340	Psychological Disorders
PSYX 350	Physiological Psychology
KIN 320	Exercise Physiology
BIOH 365	Human Anatomy and Physiology I for Health Professions
BIOH 366	Human Anatomy and Physiology I for Health Professions Lab
BIOH 370	Human Anatomy and Physiology II for Health Professions
BIOH 371	Human Anatomy and Physiology II for Health Professions Lab
Total Credits	30