

THE COLLEGE OF HEALTH PROFESSIONS AND SCIENCE

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The College of Health Professions and Science is comprised of undergraduate and graduate programs that are designed to prepare individuals for careers in the health professions and natural sciences. Academic programs in the Health Professions, such as the behavioral sciences (e.g., health promotion, human services, rehabilitation), therapeutic sciences (e.g., athletic training and RN-BSN) and support services (e.g., health administration) prepare students with the technical skills needed to work in the dynamic healthcare field. Academic programs in the Natural Sciences, such as B.S. in Biology, Chemistry, Health and Human Performance and the B.A. in Biology, prepare students for post-baccalaureate programs in Medicine, Dentistry, Veterinary, Pharmacy and Physical Therapy as well as providing them with the skills needed for careers in analytical chemistry, biochemistry and biology. These programs also prepare students to be critical thinkers in their chosen profession, develop a historical consciousness, broaden their understanding of the diversity of the profession and individuals, and develop a defined sense of values that will guide them in their career.

The College of Health Professions and Science is comprised of the following academic departments:

- Health Sciences and Human Performance
- Rehabilitation and Human Services
- Biological and Physical Sciences

Academic Advising

All new, transfer, and re-admitted students are encouraged to visit the Advising Center in McMullen Hall first floor west to meet with an academic advisor. New students will receive information regarding General Education requirements and plan of study worksheets related to their major and minor programs. Transfer and re-admitted students will work with an advisor to complete a transcript evaluation and to develop a plan of study. Students majoring in bachelor's degree programs in the College of Health Professions and Science will be advised initially through the Advising Center. As early as their freshman year, students will be assigned a faculty member for advising. Although advisors are available to assist students in designing their plan of study and navigating their academic experience, students are ultimately responsible for meeting degree requirements.

Mission

Montana State University Billings' College of Health Professions and Science prepares health professionals and natural scientists to meet the needs of an evolving society through education, research, discovery, and service.

Vision

Through an environment that promotes experiential learning, students will be transformed into our future health professionals and scientists.

Clinical and Field-Based Experiences

The College of Health Professions and Science provides a number of supervised clinical and field-based experiences designed to prepare students for work in the health professions and STEM related fields. The major aim of these experiences is to allow students to apply principles and theories from the professional knowledge base in the supervised environments. Whereas each degree program has different

expectations for clinical and field-based experience, students should clarify expectations with the faculty advisor prior to registration.

Academic Support Facilities Yellowstone Science and Health Building

The Yellowstone Science and Health Building provides 14 teaching labs, 5 classrooms, 3 multi-investigator undergraduate research suites, numerous study spaces, and shared equipment cores on the first and second floors. Students learn from some of the best faculty in their field to become well-versed and proficient in using some of the most up-to-date equipment and technology in the health, human performance, and natural sciences. To support today's various learning modalities, the latest in technology is engineered into the lecture rooms, teaching labs, and research suites to provide MSU Billings students the face-to-face and distance educational experiences that will instill in them the skills and tools they'll need to succeed in the modern-day workforce.

In addition to the Biology labs (General Biology, Botany, Ecology, Microbiology, Genetics, Cell and Molecular biology), Chemistry labs (General Chemistry, Organic and Analytical), Earth Science and Physics labs, the Yellowstone Science and Health Building houses a new A&P suite with an attached cadaver lab, a space for human biology students to gain experience and hands-on learning through cadaver work. The new athletic training room includes a wet area complete with whirlpools and ice machines, and modern treatment tables. The athletic training room serves Division II student athletes at Montana State University Billings as well as provides an instructional setting for students in the athletic training program.

The human performance lab is complete with biomechanic, biofeedback, and exercise physiology equipment including a new pulmonary exercise system for monitoring metabolic processes. An attached greenhouse with associated prep area and plant growth chambers is used to grow a variety of plants year-round, even in the deepest of Montana winters. These spaces enable both students and faculty to work on plant projects no matter the season. The building houses other specialized spaces with microscopy suites, a rock room, and advanced technology lab, instrumentation suites, tissue culture suite, and a suite dedicated to our scanning electron microscope.

Herbarium

The Yellowstone Science and Health Building houses a herbarium on campus that is registered in Index Herbariorum (a global directory of public herbaria of the world) and is part of a multi-herbarium web-accessible database of the vascular plants from the Missouri Plateau, U.S.A. The University Herbarium is a collection of preserved plant specimens (some of which date back to early 1900's) that serve as a tool for basic research in plant systematics, ecology, phytogeography, and evolution. They are actively used in teaching and research as a resource to provide population localities for studies of a diverse nature, ranging from biological control to rare plants. The University Herbarium was originally established in 1976 when the collections from the herbaria of Eastern Montana Normal School, Eastern Montana College, Rocky Mountain College, and USDA Forest Service were consolidated. It has grown steadily to about 16,000 specimens. The collections include plants of Montana (emphasis on eastern Montana and Beartooth Plateau); India; Venezuela; Roberson County, Texas; Brooklyn Botanical Gardens Herbarium; W.K. Kellogg Biological Field Station; and vascular plants of Wisconsin, Ohio, Utah, and many other places.

Physical Education Building

Faculty, staff, and students can draw on the facilities of the Physical Education Building. The building includes a 3,300-seat gymnasium with a varsity basketball court, a volleyball court, and a badminton court; a 25-yard swimming pool; a spectator gallery; dressing rooms for men and women with disabilities and an elevator with direct access to the swimming pool; men's and women's locker rooms

equipped with saunas; and a fitness center with free weights, exercise machines, and selectorized machines.

The facility also includes an annex which has a large gymnasium divisible by curtains into two sections, each with a high school-sized basketball court, two tennis courts, three volleyball courts, six badminton courts, four racquetball courts with glass backwalls and an instructor's gallery, and a suspended running track with 14 laps to the mile.

Research Projects

Montana State University Billings has active an undergraduate research agenda supported by the National Science Foundation, the National Institutes of Health, and other funding agencies, in part because of the extent to which undergraduates have been involved in faculty research in the past. The involvement of undergraduates and graduate students in research efforts has a strong, positive impact on student retention and success. At MSU Billings, students have presented research papers at international, national, state-wide, and local scientific conferences. They have had papers published in professional scientific journals. Students from research programs have successfully transitioned into post-graduate programs in medicine, physical therapy, athletic training, rehabilitation and mental health counseling, pharmacy, dentistry, veterinary programs, and Ph.D. programs. Graduates of these programs have returned to our community to practice their craft.

National Institutes of Health Program in Biomedical Research Excellence (NIH-INBRE)

MSU Billings administers grants from the National Institutes of Health program in Biomedical Research Excellence (NIH-INBRE). The NIH-INBRE grant supports faculty research in the molecular biology of infectious disease, student research opportunities in the biomedical sciences, clinical internships in Medical Laboratory Sciences and the construction of new biomedical research laboratories. The NIH-INBRE grant also involves close collaborations between faculty at MSU Billings and scientists at other universities in Montana, Alaska, Hawaii, New Mexico, Idaho, and Wyoming.

Pre-Physical Therapy

Advising Center, McMullen First Floor West
(406) 657-2240

Students interested in Physical Therapy should see an advisor for information. Forms outlining the curricula for transfer to the University of Montana program are available from the Advising Center on McMullen first floor west. Students planning to transfer to any other school will need to obtain a catalog from the college and, in consultation with their advisor, develop a plan of study to meet the specific requirements of the college of their choice. Because competition for acceptance into the professional schools is intense, the student should maintain a strong grade point average, have experience in the field, be knowledgeable of the application deadlines for the schools of choice, and apply to several schools.

B

- Biology Bachelor of Arts Degree (<https://catalog.msubillings.edu/undergraduate/college-health-professions-science/department-biological-physical-sciences/bs-biology/>)
- Biology Bachelor of Science Degree (<https://catalog.msubillings.edu/undergraduate/college-health-professions-science/department-biological-physical-sciences/bs-biology/>)
- Biology Medical Laboratory Science Option Bachelor of Science Degree (<https://catalog.msubillings.edu/undergraduate/college-health-professions-science/department-biological-physical-sciences/bs-biology-medical-laboratory-science-option/>)

- Broadfield Science Bachelor of Science Degree (<https://catalog.msubillings.edu/undergraduate/college-health-professions-science/department-biological-physical-sciences/bs-broadfield-science/>)
- Broadfield Science Teaching Licensure Option Bachelor of Science Degree (<https://catalog.msubillings.edu/undergraduate/college-health-professions-science/department-biological-physical-sciences/bs-broadfield-science-teaching-licensure-option/>)

C

- Chemistry Bachelor of Science Degree (<https://catalog.msubillings.edu/undergraduate/college-health-professions-science/department-biological-physical-sciences/bs-chemistry/>)
- Chemistry Minor (<https://catalog.msubillings.edu/undergraduate/college-health-professions-science/department-biological-physical-sciences/minor-chemistry/>)
- Coaching Minor (<https://catalog.msubillings.edu/undergraduate/college-health-professions-science/department-health-sciences-and-human-performance/minor-coaching/>)

E

- Earth Science Minor *Program placed on moratorium* (<https://catalog.msubillings.edu/undergraduate/college-health-professions-science/department-biological-physical-sciences/minor-earth-science/>)

H

- Health Administration Bachelor of Science Degree (<https://catalog.msubillings.edu/undergraduate/college-health-professions-science/department-health-sciences-and-human-performance/bs-health-administration/>)
- Health Administration Bachelor of Science/Health Administration Master Accelerated Option (3+2) (<https://catalog.msubillings.edu/undergraduate/college-health-professions-science/department-health-sciences-and-human-performance/bs-health-administration-m-health-administration-accelerated-option/>)
- Health and Human Performance Bachelor of Science/Athletic Training Master of Science Accelerated Option (3+2) (<https://catalog.msubillings.edu/undergraduate/college-health-professions-science/department-health-sciences-and-human-performance/bs-health-human-performance-ms-athletic-training-accelerated-option/>)
- Health and Human Performance Health and Wellness Option Bachelor of Science Degree (<https://catalog.msubillings.edu/undergraduate/college-health-professions-science/department-health-sciences-and-human-performance/bs-health-human-performance-health-wellness-option/>)
- Health and Human Performance Human Performance Option Bachelor of Science Degree (<https://catalog.msubillings.edu/undergraduate/college-health-professions-science/department-health-sciences-and-human-performance/bs-health-human-performance-human-performance-option/>)
- Health and Human Performance Teacher Licensure Option (Health and Physical Education K-12) Bachelor of Science Degree (<https://catalog.msubillings.edu/undergraduate/college-health-professions-science/department-health-sciences-and-human-performance/bs-health-human-performance-teacher-licensure-option-health-physical-education-k-12/>)
- Human Services Bachelor of Science Degree (<https://catalog.msubillings.edu/undergraduate/college-health-professions-science/department-rehabilitation-human-services/bs-human-services/>)

N

- Nursing 2+1 Option BSN Pathway (<https://catalog.msubillings.edu/undergraduate/college-health-professions-science/department-health-sciences-and-human-performance/nursing2-1bsn/>)

O

- Outdoor Adventure Leadership Bachelor of Science Degree (<https://catalog.msubillings.edu/undergraduate/college-health-professions-science/department-health-sciences-and-human-performance/bs-outdoor-adventure-leadership/>)

P

- Psychiatric Rehabilitation Bachelor of Science Degree *Program placed on moratorium* (<https://catalog.msubillings.edu/undergraduate/college-health-professions-science/department-rehabilitation-human-services/bs-psychiatric-rehabilitation/>)

R

- Registered Nurse (RN) to Bachelor of Science in Nursing Degree Completion Program (<https://catalog.msubillings.edu/undergraduate/college-health-professions-science/department-health-sciences-and-human-performance/rn-bsn-completion-program/>)
- Rehabilitation and Related Services Associate of Arts Degree *Program placed on moratorium* (<https://catalog.msubillings.edu/undergraduate/college-health-professions-science/department-rehabilitation-human-services/aa-rehabilitation-related-services/>)