The vision of Rocky Mountain University of Health Professions (RMUoHP) is to advance the quality, delivery and efficacy of healthcare. The Master of Science in Health Science is for bachelors prepared individuals who are employed as strength coaches, personal trainers, certified athletic trainers, military personnel, coaches and physical educators (to name a few) who are interested in pursuing an advanced degree related to their respective professions.

The Sport Performance track is suited for individuals who have a desire to increase their exercise science knowledge focusing on strength and conditioning/sport performance.

The central element of the program is the completion of a thesis or capstone project that incorporates best practice and knowledge in the area of the concentration. Exercise physiology, strength and conditioning, nutrition, injury prevention and recognition courses provide a complimentary foundation. The curriculum is designed to increase the student’s abilities to identify best practice built on evidence-based decision-making. The pedagogy emphasis affords students an interactive environment focusing on the designing of learning for individuals across the lifespan.

The program is designed for students to continue professional work obligations during the 20-month didactic portion of the program while completing five semesters of online coursework. There are two options to complete the degree program. The first is a capstone project where students in collaboration with their concentration director design meaningful evidence based project. Students complete the capstone project during the fifth semester. The second option is to complete a master’s thesis. The thesis option is started during the fifth semester, and requires one (1) additional semester beyond the completion of the didactic phase of the program. Students will work with their concentration director to assemble a committee to help mentor and facilitate the research process. The thesis option is ideal for students interested in continued advanced graduate education in their respective field of study. The capstone option would be appropriate for students more interested in advancing their education as well as their careers as practitioners.
The MS in Health Science (Sport Performance) program is committed to the development of an individual to:

- Integrate current literature and evidence-based practices into assessment and professional practice.
- Develop learner-centered instruction and instructional delivery skills based upon evidence-based practices.
- Effectively evaluate and utilize appropriate research methodology, data and decision-making
- Modify strategies to optimize changing professional environments
- Demonstrate knowledge and management of ethical and legal expectations and professional practice behaviors
- Develop knowledge expertise in the area of Sport Performance.

## Program Module Calendar

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<tr>
<th>Semester</th>
<th>Start Date</th>
<th>On-site Dates</th>
<th>End Date</th>
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| **Semester 1**  
**Fall 2018** | September 4, 2018 | No On-site Session  | December 21, 2018 |
| **Semester 2**  
**Winter 2019** | January 7, 2019   | No On-site Session  | April 26, 2019    |
| **Semester 3**  
**Summer 2019** | May 6, 2019       | No On-site Session  | August 23, 2019   |
| **Semester 4**  
**Fall 2019** | September 3, 2019 | No On-site Session  | December 20, 2019 |
| **Semester 5**  
**Winter 2020** | January 6, 2020   | No On-site Session  | April 24, 2020    |
| **Semester 6**  
**Summer 2020** | May 4, 2020       | TBD (Thesis)        | August 21, 2020   |

**Residency**  
Student must register for 4-credit Residency course (HS 711A, HS 711B, etc., as needed) each semester until capstone/thesis is completed.

*Three-year deadline from start of program is September 4, 2021*
Semester 1
(6 credits)

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HS 509  Integrated Biomechanics  (3 credits)
In this course, students will develop an understanding of the concepts of movement integration and assessment to possess a general appreciation of biomechanical relationships. The body as an interconnected unit will serve as the foundational framework for learning and application. Students will recognize and apply treatment restoration to enhance movement quality for various client/patient populations. This course will emphasize the need for continual study and sourcing of various biomechanical information. Instructor: Adam Wolf, PT, LMT, FAFS

RS 602  Educational Theory and Practice  (3 credits)
This course will provide the experienced professional with the latest evidence for effective teaching strategies and learning styles for a diverse population engaged in a range of avocations and vocations. The course will include active discussion of learning design for groups and individuals as a clinician and preceptor/clinical instructor. Instructor: Kim Shibinski, EdD

Semester 2
(6 credits)

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HS 506  Data and Decision-Making  (3 credits)
This course will focus on the use and application of statistics commonly found in the field of exercise science. Topical areas include but are not limited to determining appropriate statistical tests to perform, interpreting results and determining appropriate follow-up tests as needed. Emphasis is on design of experiments and appropriate statistical test usage, and interpretation of results. Instructor: Darrin Smith, PhD, ATC

SP 522  Applications of Strength and Conditioning in Sport Performance  (3 credits)
This course will focus on the foundational nature of strength and conditioning. Topics will include exercise physiology, biochemistry, anatomy and biomechanics. Special consideration will be placed on how principles of strength and conditioning relate to various areas. Instructor: Jason Edsall, PhD, ATC, CSCS
Semester 3
(9 credits)

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HS 502  Applied Exercise Physiology  (3 credits)
This course explores the effects of exercise on normal and abnormal neurological, muscular, articular, and skeletal tissues. Focus is on exercise strategies to improve neuromuscular coordination, endurance, vascularity, strength, power, and task activities. Topic areas will include assessment and diagnostic skill development according to evidence-based strategies. Class lectures and laboratory demonstrations will be based on the evidence for effective and efficient exercise programs. Instructor: Douglas Powell PhD, CSCS, TSAC-F, FAHA

SP 620  Program Design for Sport Performance  (3 credits)
This course will examine the outcomes associated with differential resistance training regimens. Emphasis is placed on training principles centered around periodization, variation, and progression of the acute program variables of frequency, intensity, volume, and rest across cycles of training to prevent overtraining and promote optimization of performance in various areas. This course also requires that the student participates in a practicum/internship based on the application of program design. Instructor: Victor Kizer, MS, CSCS

HS 504  Research Methods for Evidence-Based Practice  (3 credits)
This course will prepare healthcare professionals with the knowledge, skills and abilities necessary to implement evidence-based practice in their careers. This course will focus on the concepts of evidence-based practice with emphasis on forming answerable questions and effective literature search strategies. Instructor: Ethan Kreiswirth, PhD, ATC

Semester 4
(3 credits)

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SP 615  Advanced Sport Performance Technology  (3 credits)
This course will focus on technologies that have been developed to reach human interests or goals related to a particular sport. It will focus on the types, and appropriate selection and use of technology by which sport performance coaches attempt to improve training and competitive surroundings and enhance overall athletic performance. The course will provide knowledge and application of using specialised equipment and the latest modern technologies to perform tasks more efficiently, such as equipment, athletic sports gear (clothing and footwear), advanced computer stimulations and motion capture. Instructor: TBA

Content and dates are subject to change.
Semester 5
(6 credits)

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**HS 520 Injury Prevention/Recognition**  (3 credits)
This course will provide the healthcare professional with advanced health assessment skills including the comprehensive history, assessment of signs and symptoms, and pathologic changes. The course will integrate the latest assessment tests and measures and laboratory tests used to design prevention as well as treatment plans. This course will include analyses of and assessment procedures for common athletic orthopedic conditions of the upper and lower extremity. It will emphasize the appropriate teaching strategies for the instruction of assessment procedures. Instructor: Kim Foss, MS, ATC, LAT

**Courses for Student Selection:**
Students may elect to complete either a capstone project or a research intensive thesis project under the guidance of the Program Director and research committee. The project will be specifically related to the student’s professional and academic goals.

Capstone students will be required to conduct an online presentation of their capstone project during the 5th semester. Thesis option students will be required to attend an on-site session during the 6th semester to present their research. Instructor: Ethan Kreiswirth, PhD, ATC

**HS 684 Health Science Capstone Project**  (3 credits; Onsite session)

**HS 686A Health Science Thesis**  (3 credits; Online)

Semester 6 (Thesis Only)
(3 credits)

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**HS 686B Health Science Thesis**  (3 credits; Onsite session)
Students who have chosen the Thesis option will be required on-site to complete a Defense of their Thesis project.

*Semesters of Graduate Residency Credit (HS 711A, HS 711B, etc.- one course per semester) as needed*