

# HEALTH & EXERCISE SCIENCES

<https://liberalarts.pacific.edu/liberalarts/academics/departments-and-programs/health-exercise-sciences>

Phone: (209) 946-2209

Location: Main Gym

J. Mark VanNess (mvanness@pacific.edu), Department Chair; and Sharon West (swest@pacific.edu), Graduate Director.

The graduate program in Health and Exercise Sciences provides for scholarly study in all aspects of health, wellness, exercise physiology and human performance. Each area of emphasis contains a blend of core and elective courses, enabling graduate students to design their program of study to meet their personal research and educational goals. These elective courses may be selected from other departments, including but not limited to Biology, Chemistry, Communications, Education and Psychology. Each graduate student is provided with the choice between comprehensive exams or a thesis project as their capstone experience. All graduate students are encouraged to include experiential learning, collaborative research, internships and overseas experiences in their program of study.

## Programs Offered

### Master of Arts:

- Health & Exercise Science

## Admission Requirements

- Undergraduate degree in health, exercise and sport sciences, a related discipline, or completion of essential undergraduate prerequisites, as determined by the Graduate Directors.
- Minimum 2.65 GPA (Cumulative and Major)
- 2 Letters of Recommendation
- Personal Essay/Statement
- Official copies of Transcripts
- Resume/CV

\*\*No GRE required

### Communication Skills

- Prepare and deliver presentations effectively.
- Write clearly, critically and persuasively.

### Leadership and Collaboration

- Work and collaborate in groups toward a common goal.

### Critical and Creative Thinking

- Read, select and interpret important information from health, exercise & sport sciences literature.
- Design and conduct research studies using appropriate methodologies.

### Ethical Reasoning

- Identify and apply ethical standards to the design and execution of research studies.

## Master of Arts in Health, Exercise and Sport Sciences

Candidates have the choice of completing the Thesis Route or the Comprehensive Exam Route:

### Thesis Route

Students must complete a minimum of 32 units with a Pacific cumulative and major/program grade point average of 3.0 in order to earn the master of arts degree in health, exercise and sport sciences. Twenty (20) of these units must be completed in health, exercise and sport sciences courses. Twelve (12) units may be completed in other departments.

Courses must be graded B- (2.7) or higher to be counted toward the degree program.

Four HESP required classes (dependent on area of emphasis)	16
Two HESP approved electives (units must all be at the 200 level)	8
<b>Total Hours</b>	<b>24</b>

#### Notes:

- 1) Fulfillment of the prerequisite requirement for HESP 279 : i.e., completion of a course in statistics or an introduction to research course that involves statistical analysis of data, with a B- or better.*
- 2) Units received for meeting this prerequisite requirement may not be included among the minimum units required for the master's degree.*
- 3) Courses may be taken concurrently.*

#### Thesis Notes:

- 1) Thesis candidates select a Thesis Chair on the basis of shared research interests/methodologies.*
- 2) In consultation with their Thesis Chair, the thesis candidate selects their thesis committee members. The thesis committee should include a minimum of three members. A committee member may be selected from outside the department when an area of study crosses disciplinary lines.*
- 3) Thesis candidates present an open colloquium that outlines the proposed thesis problem and basic research design. The colloquium must be successfully passed in the candidate's 1st year Spring semester. In the event the candidate fails to pass the colloquium, they are immediately placed on the comprehensive exam route.*
- 4) Thesis candidates must satisfactorily complete thesis during their final semester or maintain continuing registration status until completed. Thesis are prepared in manuscript format, ready for submission to a peer-reviewed academic journal following the final oral exam.*
- 5) Must satisfactorily complete an open final oral examination encompassing the thesis and general professional knowledge.*

### Comprehensive Exam Route

Students must complete a minimum of 32 units with a Pacific cumulative and major/program grade point average of 3.0 in order to earn the master of arts degree in health, exercise and sport sciences. Twenty (20) of these units must be completed in health, exercise and sport sciences courses. Twelve (12) units may be completed in other departments. Candidates must successfully pass a written comprehensive exam in all classes that contribute towards graduation.

*Courses must be graded B- (2.7) or higher to be counted toward the degree program.*

Four required HESP classes (dependent on area of emphasis)	16
Three HESP approved electives (Units must all be at the 200 level)	12
<b>Total Hours</b>	<b>28</b>

**Notes:**

1) Fulfillment of the prerequisite requirement for HESP 279 : i.e., completion of a course in statistics or an introduction to research course involving statistical analysis of data, with a B- or better.

2) Units received for meeting this prerequisite requirement may not be included among the minimum units required for the master's degree.

3) Courses may be taken concurrently.

**Comprehensive Exam Notes:**

1) Candidates will sit comprehensive exams at the end of each academic year they are enrolled at Pacific.

2) Comprehensive Exam questions are completed for each graduate class the candidate takes in that academic year. Candidates are provided with the questions a minimum of 5 weeks in advance of the scheduled exam date. In consultation with the relevant graduate faculty member, candidates are permitted to prepare outlines for each question set. These outlines are not permitted in the exam itself. A one-page bibliography is permitted for each scheduled exam session. The bibliography will be surrendered to the Graduate Directors at the completion of the exam.

3) Candidates are permitted 1 opportunity to re-sit any failed exam questions.

4) In the event that the candidate fails the re-sit, they must complete an additional 1 unit Independent Study class (in the content area of the failed question) and pass a comprehensive exam in this class.

5) The results are transmitted to the candidate in writing.

6) The Graduate Directors serves as the coordinator of the Comprehensive Exams.

## Additional information:

- All graduate students are assigned a faculty advisor by their respective Graduate Director.
- Candidates meet with their faculty advisor twice a year to create their individual plan of study.
- All independent studies and/or independent research must be reviewed and approved by their respective Graduate Director **prior to registration**.
- Dates for open colloquiums and final oral examinations are coordinated through the Thesis Advisors.
- Dates for written comprehensive examinations are coordinated through the Graduate Directors.
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## Hlth, Exercise Sprt Sci Courses

### HESP 110. Health and Exercise Science Law. 4 Units.

This course examines legal issues and responsibilities relevant to health and exercise science professionals. This course is divided into two parts. Part I introduces basic concepts of the legal system and reviews general legal principles of tort and contract law. Part II focuses upon specific topics to which legal principles and risk management strategies apply. This course is taught combining lecture, class discussions, and experientially based assignments designed to develop the ability to practically apply circumstance to the law and risk management planning. In-class oral arguments using relevant case law, review of local facilities and programs, and legal observations in San Joaquin County courtrooms will supplement course content and offer students "hands on" learning opportunities.

### HESP 131. Assessment and Evaluation. 4 Units.

This course is the development of competencies of Health, Exercise and Sport Sciences majors for the design and implementation of procedures to appropriately measure and evaluate students, clients and/or programs. Basic data acquisition methods and statistical analysis techniques are presented. A Lab fee is required.

### HESP 148. Research in Health and Exercise Science. 4 Units.

The purpose of this course is to gather, analyze and publish findings in health and exercise science. It is a practical course that focuses on collection of scientific information, appropriate analyses of data, and formulating conclusions that fit or modify existing paradigms. Students must have completed training in research methods and statistics and be capable of effective review of scholarly literature. At the conclusion of the course students are expected to submit their findings for peer review and publication. Prerequisites: HESP 180.

### HESP 151. Elementary Physical Education. 3 Units.

This course is designed to prepare students for employment in an elementary school setting and provide them with the tools necessary to formulate and implement a comprehensive elementary PE experience for all students. Participants learn a wide range of teaching skills that facilitate the ability to create a quality active learning environment in elementary PE. Students explore effective teaching and assessment strategies, classroom management skills, the use of constructive feedback, the negotiation of diverse classrooms and the development of appropriate student learning outcomes. Students also are introduced to the subject matter of elementary PE and will undertake several teaching episodes. This course encourages students to engage in reflexive teaching practices, develop physically educated young people, maximize student involvement and enjoyment in PE and integrate core curriculum subject matter into PE lessons.

### HESP 154. Stress Physiology. 4 Units.

In this course you will examine what stress is and how your body tolerates, adapts, and allows you to flourish with stresses.

### HESP 157. The Clinician in Health and Exercise Science. 4 Units.

This course integrates theory and practice and requires students to develop a research topic, consistent with an explicitly and narrowly defined area of interest. Permission of the instructor is required.

### HESP 160. Principles of Coaching. 3 Units.

This course is designed as an introduction to the principles of athletic coaching for modern day athletes. Emphasis is on a holistic approach to the theories, knowledge, and practices of coaching sport as prescribed by the National Standards for Sport Coaches. This course will explore coaching at various levels. Topics will include developing a coaching philosophy, evaluating theories in student-athlete motivation, understanding team dynamics, leadership, administration responsibilities, and improving player performance.

**HESP 173. Health Care Management and Professional Development. 4 Units.**

This course is an in-depth study of the management of health care organizations related to finances, facilities, equipment, organizations structures, medical/insurance records, risk management, human relations, and personnel. Practical and conceptual skills are taught to help students focus on more efficient health care delivery. Also covered is the development of leadership skills, future trends in health care management, guidelines for designing effective work groups and managing conflict.

**HESP 179. Introduction to Research. 4 Units.**

This course covers the rationale for and status of professional research; research designs and their applicability to students' disciplines; review, critique and synthesis of selected literature; development of research proposal and pretest of instrument.

**HESP 180. Epidemiology. 4 Units.**

This course is an introduction to the principles and practice of epidemiology. It explores the history, concepts, and methods of epidemiologic investigation. The statistical models taught in this class include the receiver operating characteristic curve, chi-square test, t-test, binary logistic regression, and linear regression. Students will learn to develop research designs that employ these tests and will be able to conduct them to evaluate patient care, quantify risk, and understand the patterns of illness and disease in populations.

**HESP 182. Exercise Testing and Prescription. 4 Units.**

This course is primarily designed to provide students with the hands-on training and theoretical background to competently assess levels of wellness/fitness in an "apparently healthy" (i.e. low risk) adult population. The topics and skills addressed include health screening protocols/risk stratification, use of Informed Consent documents, as well as measurement protocols for the health-related components of fitness (i.e. cardiorespiratory fitness, muscular fitness, flexibility, body composition). These skills are then used to prescribe lifestyle and/or exercise modifications that result in individual progress toward a desired goal. Prerequisite: HESP 129.

**HESP 189C. Practicum: Biomechanics. 2 Units.**

These courses provide advanced practicum work in Sport Medicine. See HESP 089 for subcategories and enrollment limitations. Grading option is Pass/No Credit only.

**HESP 189D. Practicum: Exercise Physiology. 2 Units.**

These courses provide advanced practicum work in Sport Medicine. See HESP 089 for subcategories and enrollment limitations. Grading option is Pass/No Credit only.

**HESP 189H. Practicum: Sports Law. 2 Units.**

These courses provide advanced practicum work in Sport Medicine. See HESP 089 for subcategories and enrollment limitations. Grading option is Pass/No Credit only.

**HESP 195. Ethical Issues in Sport. 3 Units.**

The primary goal of this course is to enhance student awareness regarding their values, their evolving moral and ethical codes, and the ways of addressing moral problems. Students examine various ethical theories and questions encountered in the field of Sport Sciences. As part of this course, students need to identify necessary information from various sub-disciplines in order to make professional and ethical decisions. Senior standing.

**HESP 200. Advanced Health and Exercise Science Law. 4 Units.**

This course examines legal issues and responsibilities relevant to health and exercise science professionals. This course is divided into two parts. Part I introduce basic concepts of the legal system and reviews general legal principles of tort and contract law. Part II focuses upon specific topics to which legal principles and risk management strategies apply. This course is taught combining lecture, class discussion, a written research project, and experientially based assignments designed to develop the ability to practically apply specific circumstances and facts to the law and risk management planning. In-class oral arguments using relevant case law, review of local facilities and programs, and legal observations in San Joaquin County courtrooms will supplement course content and offer students "hands on" learning opportunities.

**HESP 257. The Clinician in Health and Exercise Science. 4 Units.**

This course offers students an opportunity to integrate academic, experiential, and career interests. Each student will: (1) observe at least one carefully selected clinical site throughout the term that is relevant to individual professional/educational interests or research reports that address career options in HESP (if observation sites are unavailable) and (2) research a narrowly defined issue relevant to HES. This course is intended to enhance professional development through experiential learning, continue the development of research skills, advance academic knowledge, and address educational priorities. Students should complete the course with a better understanding of at least one career option within the broad field of health and exercise science and its related research issues.