College:
Natural and Health Sciences

Degree and Program Offered:
Bachelor of Science
Major - Applied Health Sciences

Student Organizations:
The applied health sciences program coordinates with active student organizations that have interest in professional health careers such as the Pre-Health Club and the Biology Club.

Career Possibilities:
The applied health sciences curriculum provides students with the appropriate classes and experiences that will allow them to meet the requirements necessary to qualify for professional health programs outlined as options within the concentrations offered in the major. While the majority of graduating students are expected to pursue advanced degrees in health care and health sciences, students completing this degree will also be competitive for entry level careers in general health sciences, scientific/medical research, and fitness/health promotion.

Program Overview
The bachelor of science in applied health sciences, housed in the Center for Health Sciences (CHS), is designed to prepare students with an interdisciplinary and liberal arts foundation for professional careers within the health care systems. This major is intended primarily for qualified students who wish to pursue advanced degrees and/or careers in the professional fields of physical therapy, occupational therapy, chiropractic, physician assistant, athletic training, and kinesiology. The B.S. in applied health sciences (AHS) provides UW-Parkside students with a pre-professional major that is appropriate for health careers; and serves as a viable alternative to majors such as biological sciences, fitness management, sport management and nursing. In addition to completing the academic course work, students must earn a cumulative GPA of 2.5 to graduate with the AHS major.

Program-Level Outcomes
1. To provide UW-Parkside students with a rigorous health sciences degree that will allow them to gain admission into professional/graduate health programs.
2. To provide UW-Parkside students with a rigorous health sciences degree that will allow them to be competitive and successful in entry-level health science careers.

Steering Committee
The steering committee is chaired by the director. The current steering committee members include: Tsun-Mei Chang (CHEM), Bryan Lewis, Director (BIOS), Summer Ostrowski (BIOS), Chris Noto (BIOS), Fabian Preuss (BIOS), Edward Bowden (PSYC) and Kenneth Wilka (HESM).

Internship/Fieldwork
The applied health sciences program requires that students gain experiences within their respective concentrations to complete their degree. However, students who wish to be competitive in gaining acceptance into professional programs are strongly encouraged to gain additional program-specific health care experiences.

The AHS 494 - Internship/Fieldwork in Applied Health Sciences course provides students with learning experiences within professional fields that are related to their professional career goals. These supervised experiences will require the student to gain exposure to all professional aspects of their chosen careers including, but not limited to: business operations, professional competencies and conduct, and overall work environment. Placement approval by AHS academic adviser or the CHS director is required. Students of sophomore standing or higher may register for this class multiple times in multiple semesters. One (1) credit = fifty (50) hours of experience. Students must complete a total of six (6) credits (300 hours) for completion of the major requirement. Additionally, no more than twelve (12) credits may be applied toward general graduation requirements.

Articulation Agreements
St. Scholastica
Students who choose the pre-athletic training concentration within the AHS major are eligible to qualify for an articulation agreement with the masters degree athletic training program at St. Scholastica University in Minnesota. The top two students graduating with the pre-athletic training concentration are eligible for this program. For more information, interested students should contact their AHS adviser.

Gateway Technical College
Students can participate in an articulation agreement between the physical therapy assistant program at Gateway Technical College and the pre-athletic training and/or pre-physical therapy concentrations within the applied health sciences major. This program is a dual enrollment program where the students take classes at both Gateway Technical College and UW-Parkside.
during the first year of the program, finish their associate degree in physical therapy assistant at Gateway Technical College during their second year, then transfer seamlessly to UW-Parkside and finish their bachelor of science degree with a major in applied health sciences with either a concentration in pre-athletic training and/or pre-physical therapy. For more information, interested students should contact their AHS adviser.

## Requirements for the Applied Health Sciences Major (77-109 credits)

The major in applied health sciences has a core requirement of 66-67 credits from a variety of departments relevant for pursuing careers in the various concentrations within the major. Within the major, a minimum of 15 credits in courses numbered 300 or above must be completed at UW-Parkside. Students also must be aware of and satisfy UW-Parkside’s requirements for graduation in addition to the requirements for the applied health sciences major. In addition to completing the academic course work, students must earn a cumulative GPA of 2.5 to graduate with the AHS major.

### A. Core Courses (66-67 credits)

1. **Applied Health Science Courses (9 credits)**
   - AHS 101 Introduction to Applied Health Sciences………….3 cr
   - AHS 494 Internship/Fieldwork in Applied Health Sciences………6 cr (additionally, students can gain these credits through either pre-approved BIOS 494 or HESM 498)

2. **Biological Sciences Courses (22 credits)**
   - BIOS 101 Bioscience*…………………………………4 cr
   - BIOS 102 Organismal Biology…………………..4 cr
   - BIOS 105 Human Physiology and Anatomy I**……5 cr
   - BIOS 106 Human Physiology and Anatomy II**……5 cr
   - BIOS 210 Biostatistics…………………………………4 cr
   ** (students may substitute BIOS 300/341 for BIOS 105/106 sequence)

3. **Business Course (3 credits)**
   - BUS 100 Introduction to Business*…………………3 cr

4. **Chemistry Courses (10 credits)**
   - CHEM 101 General Chemistry I*…………………..5 cr
   - CHEM 102 General Chemistry II…………………..5 cr

5. **Mathematics Course(s) (5-6 credits)**
   - MATH 114 College Algebra II with Trigonometry…...5 cr
     OR
   - MATH 112 College Algebra II…………………………4 cr
     AND
   - MATH 113 Trigonometry……………………………...2 cr

6. **Sport and Fitness Management Courses (17 credits)**
   - HESM 270 Lifetime Wellness*………….3 cr
   - HESM 280 Sport and Fitness Nutrition*…………3 cr
   - HESM 353 Biomechanics’…………………………4 cr
   - HESM 354 Physiology of Exercise’………………4 cr
   - HESM 358 Sport and Fitness Psychology’…………3 cr

*  These classes have a requirement of either BIOS 105/106 or BIOS 300/341 with a grade of “C” or better.

** This class has a requirement of PSYC 101 with a grade of “C” or better.

In addition to satisfying the core requirements within the applied health sciences major, students must choose a concentration based on their area of interest and continuing education. In order to obtain a concentration, students must complete all the following required course work in addition to the above stated core courses. The courses outlined in the concentrations will satisfy most of the academic requirements necessary to gain acceptance into the relevant professional programs. However, students should work closely with their applied health sciences adviser to stay abreast of any changes that occur within these requirements as they can fluctuate during any application cycle. Ultimately, it is the students’ responsibility to ensure that they have satisfied the academic requirements for the specific schools and programs to which they wish to apply.

### B. Concentrations (11-42 credits)

Choose one:

1. **Pre-Athletic Training (16 credits, 82-83 credits total)**
   - HESM 345 Prevention and Care of Athletic Injuries…………………..3 cr
   - HESM 410 Fitness Assessment and Prescription…………………..3 cr
   - HESM 445 Therapeutic Exercise for Athletic Injuries…………………..3 cr
   - PHYS 101 Principles of Physics*…………………..4 cr
   OR
   - PHYS 102 Principles of Physics with Medical Applications…………………..4 cr
   - PSYC 101 Introduction to Psychological Science*…………………..3 cr

2. **Pre-Chiropractic (21 credits, 87-88 credits total)**
   - CHEM 321 Organic Chemistry I…………………..4 cr
   - CHEM 322 Organic Chemistry II…………………..4 cr
   - CHEM 323 Organic Chemistry Laboratory………..3 cr
   - PHYS 105 College Physics I*…………………..5 cr
   - PHYS 106 College Physics II…………………..5 cr

3. **Pre-Kinesiology (11 credits, 77-78 credits total)**
   - BIOS 300 Human Functional Anatomy…………………..4 cr
   - BIOS 341 Mammalian Physiology…………………..3 cr
   ** (Students who choose to take the kinesiology concentration can substitute BIOS 300/341 for BIOS 105/106)
   - PHYS 101 Principles of Physics*…………………..4 cr
   OR
   - PHYS 102 Principles of Physics with Medical Applications…………………..4 cr

4. **Pre-Occupational Therapy (13 credits, 79-80 credits total)**
   - PHYS 101 Principles of Physics*…………………..4 cr
   OR
   - PHYS 102 Principles of Physics with Medical Applications…………………..4 cr
PSYC 101  Introduction to Psychological Science* 3 cr
PSYC 210  Introduction to Human Development 3 cr
PSYC 360  Abnormal Psychology 3 cr

5. Pre-Physician Assistant (42 credits, 108-109 credits total)

BIOS 260  General Genetics 4 cr
BIOS 303  Microbiology 4 cr
BIOS 307  Biochemical Metabolism 3 cr
BIOS 300  Human Functional Anatomy 4 cr
BIOS 341  Mammalian Physiology 3 cr
(Students who choose to take the PA concentration can substitute BIOS 300/341 for BIOS 105/106)
CHEM 321  Organic Chemistry I 4 cr
CHEM 322  Organic Chemistry II 4 cr
CHEM 323  Organic Chemistry Laboratory 3 cr
PHYS 101  Principles of Physics* 4 cr
OR
PHYS 102  Principles of Physics with Medical Applications 4 cr

PSYC 101  Introduction to Psychological Science* 3 cr
PSYC 210  Introduction to Human Development 3 cr
PSYC 360  Abnormal Psychology 3 cr

6. Pre-Physical Therapy (26 credits, 92-93 credits total)

BIOS 300  Human Functional Anatomy 4 cr
BIOS 341  Mammalian Physiology 3 cr
(Students who choose to take the PT concentration can substitute BIOS 300/341 for BIOS 105 and BIOS 106)
HESM 345  Prevention and Care of Athletic Injuries 3 cr
HESM 445  Therapeutic Exercise for Athletic Injuries 3 cr
PHYS 105  College Physics I* 5 cr
PHYS 106  College Physics II* 5 cr
PSYC 101  Introduction to Psychological Science* 3 cr

* These courses also satisfy general education requirements at UW-Parkside.

Courses in Applied Health Sciences (AHS)

101  Introduction to Applied Health Sciences 3 cr
Prereq: None. Freq: Fall, Spring.
Provides an overview of the applied health sciences major. Focuses on specific information about health career options. Covers the value and importance of service, current topics in health care, ethics in the health sciences, and cultural sensitivity within health careers. Additionally, students will gain experience in professional writing, presentation techniques, portfolio development and service learning.

494  Internship/Fieldwork 1-6 cr
Prereq: AHS 101, sophomore or higher standing, and approval by AHS academic adviser or the CHS director. Freq: Fall, Spring, Summer.
Provides students with learning experiences within professional fields that are related to their professional career goals; including, but not limited to: business operations, professional competencies and conduct, and overall work environment. Requires placement approval by AHS academic adviser or the CHS director. May be repeated for credit. No more than six (6) credits can be applied toward the AHS major and no more than twelve (12) can count toward general graduation requirements.