EXERCISE SCIENCE

Brian Jackson, Chair; Jenelle Andrews, Jennifer Bhalla, Rebecca Y. Concepcion, Kathryn Dolphin, Shawn Henry, Brian Searcy, Phillip Schot

The mission of the Exercise Science program (http://www.pacificu.edu/as/exercise/) is to contribute to the generation, dissemination and application of knowledge related to human movement in multiple contexts. Students and faculty are actively engaged in each area. While a health-science context is emphasized, the curriculum enables students to understand movement by integrating multiple scientific perspectives so as to be successful in a variety of arenas (e.g., employment in the fitness/exercise field, graduate study in professional or academic disciplines).

Program Learning Outcomes
A student completing a major in Exercise Science shall demonstrate the ability to:
- Understand and apply fundamental principles from the various sub-disciplines in Exercise Science to a variety of contexts (e.g., health, fitness, rehabilitation, education);
- Use qualitative and quantitative reasoning and evidence, synthesizing information from a variety of origins to methodically and systematically solve problems and develop interventions in the human movement domain;
- Communicate effectively, orally and in writing, in accordance with disciplinary standards; and
- Design, conduct, interpret, and evaluate human movement science research.

All students will complete one of two emphasis areas, both of which require 62 credit hours. The Integrative Physiology path incorporates additional coursework from the parent disciplines in the natural / physical sciences whereas the Motor Behavior track accentuates behavioral and applied considerations related to a variety of aspects of movement. Courses with the EXIP prefix satisfy natural science core requirements. Both routes, in combination with strategic selection of elective / core courses that satisfy prerequisites for specific graduate programs, can serve students with aspirations of pursuing graduate studies in health professions (PT, OT, PA, DC, MD, OD), education (MAT) or academics (MS, PhD). The common and distinctive coursework requirements for each emphasis are listed below. There is not necessarily a specified order for the courses. Only courses marked with asterisks may be repeated for credit, and then only with a change of topic and only in consultation with the advisor.

Exercise Science: Requirements for the Major

**Core Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXMB 200</td>
<td>Exercise Science Foundations</td>
<td>2</td>
</tr>
<tr>
<td>EXMB 335</td>
<td>Psychosocial Issues in ExSci</td>
<td>4</td>
</tr>
<tr>
<td>MATH 207</td>
<td>Statistics (or PSY 350 or SOC 301)</td>
<td>4</td>
</tr>
<tr>
<td>EXIP 281</td>
<td>Nutrition</td>
<td>4</td>
</tr>
<tr>
<td>EXIP 345</td>
<td>Biomechanics</td>
<td>4</td>
</tr>
<tr>
<td>EXIP 365</td>
<td>Perceptual Motor Learning</td>
<td>4</td>
</tr>
<tr>
<td>EXIP 385</td>
<td>Exercise Physiology</td>
<td>4</td>
</tr>
<tr>
<td>EXIP 399</td>
<td>Junior Seminar</td>
<td>2</td>
</tr>
<tr>
<td>EXIP 400</td>
<td>Advanced Analysis in Kinesiology</td>
<td>2</td>
</tr>
<tr>
<td>EXIP 498 &amp; 499</td>
<td>Senior Research I &amp; II</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 200</td>
<td>Intro Bio: Flow of Energy</td>
<td>4</td>
</tr>
<tr>
<td>HBIO 230</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>HBIO 231</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
</tbody>
</table>

Chose one emphasis:

**Integrative Physiology**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 201</td>
<td>Intro Biology: Flow of Biology Information</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 220</td>
<td>General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 230</td>
<td>General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>PHY 202</td>
<td>Introductory Physics I (or PHY 232)</td>
<td>4</td>
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</tbody>
</table>

Two upper-division credits, chosen in consultation with advisor, which may include, but are not limited to:

<table>
<thead>
<tr>
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<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HBIO 440</td>
<td>Advanced Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>EXIP 481</td>
<td>Applied Nutrition</td>
<td>4</td>
</tr>
<tr>
<td>EXIP 495</td>
<td>Research</td>
<td>1-4</td>
</tr>
<tr>
<td>EXMB 475</td>
<td>Internship</td>
<td>1-2</td>
</tr>
</tbody>
</table>

**Motor Behavior**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXIP/EXMP electives or other courses via petition and departmental approval</td>
<td>18</td>
<td></td>
</tr>
</tbody>
</table>

**Capstone:** In the senior year, students complete a 2-credit course emphasizing advanced research methods and analysis (EXIP 400) in one of the Exercise Science sub-disciplines that prepares them for the research proposal. Students must also complete two research credits (usually sequentially): EXIP 498 (Senior Research I) and EXIP 499 (Senior Research II). Each of these courses is one credit. The benchmark activities for Senior Research I focus on data collection as per the research proposal developed in the advanced class; in Senior Research II students summarize and disseminate the project findings publicly via poster, presentation, or manuscript.

**Minors:** Two minors are offered by the department, Human Movement Studies (HMS) and Exercise Science (ES), both of which require 26 credits. Exercise Science majors are not eligible to earn a minor in HMS or ES; however, they are free to take courses as electives, subject to institutional limitations. Exercise Science majors are eligible to pursue a minor in Outdoor Leadership (see below).

Exercise Science: Requirements for the Minor

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXMB 200</td>
<td>Exercise Science Foundations</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 200</td>
<td>Intro Bio: Flow of Energy</td>
<td>4</td>
</tr>
<tr>
<td>HBIO 230</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>HBIO 231</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
</tbody>
</table>

Three of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXIP 281</td>
<td>Nutrition</td>
<td>4</td>
</tr>
<tr>
<td>EXMB 335</td>
<td>Psychosocial Issues in ExSci</td>
<td>4</td>
</tr>
<tr>
<td>EXIP 345</td>
<td>Biomechanics</td>
<td>4</td>
</tr>
<tr>
<td>EXIP 365</td>
<td>Perceptual Motor Learning</td>
<td>4</td>
</tr>
<tr>
<td>EXIP 385</td>
<td>Physiology of Exercise</td>
<td>4</td>
</tr>
</tbody>
</table>
Human Movement Studies: Requirements for the Minor

**EXMB 200** Exercise Science Foundations 2 credits
**EXMB 335** Psychosocial Issues in ExSci 4 credits
EXMB or EXIP courses, including at least 4 credits of upper-division 20 credits

**Exercise Science / Athletic Training**

The College of Health Professions offers entry-level graduate clinical education in Athletic Training (AT) that articulates directly with Exercise Science. It consists of three years of fairly typical work in the College of Arts and Sciences (A&S) and two years of work in the clinical program. This 3/2 pathway is built upon options within the Motor Behavior emphasis and available only to students accepted to the highly selective AT program. Students complete the Bachelor of Science and Master of Science in Athletic Training in 5 years, rather than in 6 as would be the case if they took these two programs separately.

To utilize this route, all A&S core coursework requirements (with the exception of Capstone), all Athletic Training prerequisites, specified Exercise Science classes, and a minimum of 93 total credits shall be completed by the end of the 3rd academic year. During the fall of the junior year, students may apply to begin clinical studies in the AT program for the 4th academic year. If a student is accepted to the AT program, specific coursework successfully completed according to Athletic Training program standards during the first clinical year will satisfy the remaining requirements for the BS in Exercise Science with a Motor Behavior emphasis. These students are also required to deliver a formal public presentation overview of their first year clinical internship experiences to complete the A&S Capstone requirement. The undergraduate diploma will be conferred at the traditional May commencement ceremony of the student’s 4th year. If a student is not accepted into the AT program, s/he will have the opportunity to complete the Motor Behavior emphasis during the traditional time-frame with little to no complications.

**Use the Motor Behavior Emphasis, incorporating the following:**

The Exercise Science core involves the following substitution options:

**EXIP 399** is replaced with **AT 550 – Research Methods** 2 credits
**EXIP 400** is replaced with **AT 560 – Evidence-Based Practice** 2 credits
**EXIP 498 & 499** are replaced with **AT 540 & 541 - Clinical Internships** 4 credits

Complete the following, with one substitution allowed:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXMB 335</td>
<td>Psychosocial Issues in ExSci</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>AT 520</td>
<td>Sports Psychology</td>
</tr>
<tr>
<td>EXMB 366</td>
<td>Human Motor Development</td>
</tr>
<tr>
<td>HBIO 440</td>
<td>Advanced Human Anatomy</td>
</tr>
</tbody>
</table>

The 8 flexible credits in Motor Behavior are replaced by 5 credits from the AT program:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 510</td>
<td>Physical Agents and Mechanical Modalities        3 credits</td>
</tr>
<tr>
<td>AT 531</td>
<td>Preventionan Sports Injuries I                   2 credits</td>
</tr>
</tbody>
</table>

Fourteen credits successfully completed in the first AT year count toward graduation requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 500</td>
<td>Orthopedics: Lower Quadrant                      7 credits</td>
</tr>
<tr>
<td>AT 501</td>
<td>Orthopedics: Upper Quadrant                      7 credits</td>
</tr>
</tbody>
</table>

**COURSES**

**EXIP-155** Special Topics
Go to https://www.pacificu.edu/about-us/centers-institutes/advising-center/new-topics-travel-class-descriptions or see the Advising Center.

**EXIP-255** Special Topics
Go to https://www.pacificu.edu/about-us/centers-institutes/advising-center/new-topics-travel-class-descriptions or see the Advising Center.

**EXIP-275** Internship
See department for details. Internship contract required.

**EXIP-281** Nutrition
Detailed study of the relationship between nutrition and total individual health across the life-span. Emphasis will be placed on the essential nutrient chemical conversions during digestion, absorption and metabolism and their contribution to optimal health. Individual nutritional analysis and a personalized diet plan will be required. 4 credits.

**EXIP-295** Ind Study in Integrated Physiology
See department for details. Independent study contract required.

**EXIP-345** Biomechanics & Lab
Study of the structure and functioning of the human body via the methods of classical mechanics. Prerequisite: BIOL 224 or BIOL 230 or HBIO 230; MATH 125; and EXMB 200 each with minimum grade of C-. 4 credits.

**EXIP-355** Special Topics
Go to https://www.pacificu.edu/about-us/centers-institutes/advising-center/new-topics-travel-class-descriptions or see the Advising Center.

**EXIP-365** Perceptual Motor Learning
Study of issues related to the understanding, teaching and learning of motor skills. Examination of factors (individual, task, environment) and interactions that influence skill acquisition and performance in daily, recreational, clinical and scientific contexts. Prerequisite: EXMB 200 or Statistics (MATH-207, PSY-350, or SOC-301), each with a minimum grade of C-. 4 credits.

**EXIP-385** Physiology of Exercise & Lab
The branch of physiology that deals with function of the body during exercise and adaptations that occur in response. Knowledge and application of scientific principles are necessary to develop peak performance in athletes and maintain health and fitness in the general population - quantitatively and qualitatively improving life. Prerequisite: BIOL 200 or BIOL 202; BIOL 231 or BIOL 240 or HBIO 231; and EXMB 200 (or concurrent enrollment), each with a minimum grade of C-. 4 credits.

**EXIP-395** Independent Study
See department for details. Independent study contract required.
**EXIP-399** Junior Seminar
Introduces students to the primary research literature in the field of Exercise Science. Topics will include procedures for locating sources of information; introduction to various types of research methodologies; training in the consumption of literature in multiple subdisciplines within Exercise Science, focusing on understanding and analyzing results of scientific studies; training in human subject ethics and the Institutional Review Board process; and enhancing writing skills relevant to scientific reporting. There will be an opportunity for First Aid/CPR/AED certification or recertification. Prerequisites: Declared Exercise Science major; EXMB 200, HBI 230 and HBI 231; and 3 of the following courses: EXIP 345, EXIP 365, EXIP 385, EXMB 333, EXMB 336; and MATH 207, or PSY 350, or SOC 301. All specific prerequisite courses must be completed with a minimum grade of C-. Pass/No Pass. 2 credits.

**EXIP-400** Advanced Analysis in Kinesiology
This course develops the greater knowledge depth and more sophisticated skills needed to critically analyze existing research literature and design original investigations in a sub-disciplinary area of kinesiology that matches students' interests, backgrounds and goals. Topics will fall within the recognized expertise area of the instructor. Includes active learning components. Prerequisite: Pass EXMB 105 or OL 107, and EXIP 399; and complete 3 of the following courses with a minimum grade of C- in each: EXIP 345, EXIP 365, EXIP 385, EXMB 322, EXMB 323, EXMB 333, or EXMB 336. Instructor's consent required. 2 credits.

**EXIP-455** Special Topics
Go to https://www.pacificu.edu/about-us/centers-institutes/advising-center/new-topics-travel-class-descriptions or see the Advising Center.

**EXIP-475** Internship
Internship is an off-campus educational field experience tailored to academic/career goals, where students carefully and thoughtfully apply content from coursework to the situation in which they are engaged. All arrangements must be completed by the student 2 weeks prior to the term in which internship work will occur. Prerequisite: 12 credits of Exercise Science coursework (EXIP & EXMB), each with a minimum grade of C-. Internship contract required. Pass/No Pass.

**EXIP-481** Applied Nutrition
A comprehensive review of current research on nutritional strategies to combat obesity and chronic disease and the latest guidelines for proper fueling and hydration for physical activity. Nutritional analyses and development of individualized diet plans for Boxer Boot Camp participants will be required. Counts toward core requirement: Civic Engagement. 4 credits.

**EXIP-495** Independent Research
Faculty supervised, student-conducted research activities. May be repeated for new/continuing projects. Independent study contract required.

**EXIP-498** Senior Research I
This is the first formal phase of capstone work for senior Exercise Science majors. Students will propose and execute a project on a current topic in exercise science. Students must successfully complete EXIP-498 and EXIP-499 to meet the capstone requirement and normally complete these in consecutive semesters. Prerequisite: EXIP 399 and EXIP 400 with minimum grade C-. Instructor's consent required. 1 credit.

**EXIP-499** Senior Research II
This is the final phase of capstone work for senior Exercise Science majors. Students will conclude and disseminate the results of the senior project via poster, presentation, or manuscript. Students must successfully complete both EXIP-498 and EXIP-499 to meet the capstone requirement and normally complete these in consecutive semesters. Prerequisite: EXIP 498 with a minimum grade of C- (or concurrent enrollment); Instructor's consent required. 1 credit.

**EXMB-105** First Aid
This course provides lay responders with skills and information needed in emergency situations to help sustain life and minimize pain and consequences of injury or sudden illness until professional medical help becomes available. More advanced than standard American Red Cross first aid/CPR class. Pass/No Pass. 1 credit.

**EXMB-195** Independent Study
See department for details. Independent study contract required.

**EXMB-200** Exercise Science Foundations
This course presents the basic scientific foundations of and techniques used in the various sub-disciplines of Exercise Science. Prerequisite: MATH 122 with minimum grade of C (or concurrent enrollment); 2 credits.

**EXMB-205** Care and Prevention of Athletic Injuries
Students will learn to prevent, evaluate, and care for injuries and other health concerns common to athletic participation. The basics of emergency care and preventive taping will also be addressed. Participation fee required. If a student drops or withdraws from the class after some expenses have been accrued the student will be responsible for those expenses. Prerequisite: EXMB 105 or OL 107. 2 credits.

**EXMB-255** Special Topics
Go to https://www.pacificu.edu/about-us/centers-institutes/advising-center/new-topics-travel-class-descriptions or see the Advising Center.

**EXMB-275** Internship
See department for details. Internship contract required. 1-4 credits.

**EXMB-295** Independent Study in Motor Behavior
See department for details. Independent study contract required.

**EXMB-303** Medical Terminology
This course is designed to provide students with an understanding of the language of medicine. Students will be required to learn basic elements, rules of building and analyzing medical words, and medical terms associated with the body as a whole. Prerequisite: BIOL 200 or BIOL 202 with a minimum grade C-. 1 credit.

**EXMB-312** Coaching Principles
General principles applicable to the coaching of sports including strategy and tactics, motivation, ethics, liability, budgeting, and development of organizational, interpersonal, and communication skills. Prerequisites: EXMB-105 and EXMB-311 with a minimum grade of C-. 2 credits.

**EXMB-313** Strength & Conditioning Methods
Principles, methods and materials relevant to the design and implementation of strength, endurance, flexibility, speed, power, balance and agility enhancement for diverse populations based on sound scientific principles. Prerequisite: EXIP 385 with minimum grade of C. Recommended: EXIP 345. 2 credits.

**EXMB-335** Psychosocial Factors in Exercise Science
Focuses on the social and psychological factors related to participation in sport and physical activity. Students will gain competency in theory and research through the study of such topics of personality, gender, motivation, and socioeconomic status, among others. The focus will be on the North American experience; however, examples from around the world will be used to help students gain different perspectives of the relative importance of sport in North
American, the relative abundance of opportunities to participate in physical activity in North America, and the relative increase in the number of barriers to participating in physical activity across the globe. Prerequisites: EXMB 200 and Sophomore standing or above (30 or more completed credits). 4 credits.

**EXMB-350 Selected Topics in Human Movement**
Study of a particular topic in the field of human movement (e.g., History of Sport, Exercise & Mental Health, Ergogenic Aids, Gender Issues in Sport) selected by the instructor and approved by the Exercise Science Department. May or may not include lab/practical activity. Prerequisite: Sophomore standing or above (30 or more completed credits); additional prerequisites may apply depending on topic. May be repeated for credit when topic varies. 2 or 4 credits.

**EXMB-355 Special Topics**
Go to https://www.pacificu.edu/about-us/centers-institutes/advising-center/new-topics-travel-class-descriptions or see the Advising Center.

**EXMB-366 Human Motor Development**
This course is designed to use a lecture/discussion/activity structure to study issues related to the development of human motor behavior over the lifespan. Current theory and research will be discussed related to motor and behavioral changes that are commonly experienced in humans from early childhood to late adulthood. Prerequisites: EXIP 365 with minimum grade C-. 2 credits.

**EXMB-395 Independent Study**
See department for details. Independent study contract required.

**EXMB-413 Adult Fitness Practicum: Boxer Boot Camp**
A supervised practical experience working with adults in an exercise setting. Boxer Boot Camp is a Pacific University faculty/staff exercise program. Students contribute to individualized program design and serve as fitness leaders for participants. Prerequisite: EXIP 281; and EXIP 385 and EXMB 313. Instructor's consent required. Meets core requirement: Civic Engagement. Pass/No Pass. 0 credits.

**EXMB-455 Special Topics**
Go to https://www.pacificu.edu/about-us/centers-institutes/advising-center/new-topics-travel-class-descriptions or see the Advising Center.

**EXMB-475 Internship**
Internship is an off-campus educational field experience tailored to academic/career goals, where students carefully and thoughtfully apply content from coursework to the situation in which they are engaged. All arrangements must be completed by the student 2 weeks prior to the term in which internship work will occur. Prerequisites: 12 credits of Exercise Science coursework (EXIP & EXMB), each with a minimum grade of C-. Internship contract required. Pass/No Pass.

**EXMB-495 Independent Research**
See department for details. Independent study contract required.

**HBIO-110 Human Biology**
An introduction to basic anatomy and physiology of the human organism. This course is designed for non-science majors. Laboratory is integrated with lecture. Students cannot receive credit for HBIO 110 and any combination of the following: BIOL 224, BIOL 240, BIOL 230, BIOL 231, HBIO 230 or HBIO 231. Does not count toward a Biology major or minor. 4 credits.

**HBIO-230 Human Anatomy & Physiology I**
Human Anatomy and Physiology I is a year long course that explores the structure and function of the human body in an integrated fashion. We will cover the 11 anatomical systems and understand how the structure of the human body relates to and defines its function. Emphasis will be placed on integration of systems and information flow. Human Anatomy and Physiology I introduces cytology and histology while surveying the skeletal, nervous, muscular, endocrine and reproductive systems. Prerequisite: BIOL 200 with a minimum grade of C-. Corequisite: HBIO 230L. 4 credits.

**HBIO-230L Human Anatomy & Physiology I Lab**
Laboratory to accompany Human Anatomy & Physiology I lecture. Corequisite: HBIO 230. 0 credits. Letter graded.

**HBIO-231 Human Anatomy & Physiology II**
Human Anatomy and Physiology II emphasizes sensory physiology, circulatory, lymphatic, immune, respiratory, digestive and urinary systems. Prerequisite: HBIO 230 with a minimum grade of C-. Corequisite: HBIO 231L. 4 credits.

**HBIO-231L Human Anatomy & Physiology II Lab**
Laboratory to accompany Human Anatomy & Physiology II lecture. Corequisite: HBIO 231. 0 credits. Letter graded.

**HBIO-440 Advanced Human Anatomy and Lab**
Advanced study of gross and histological structure of the human body. Focus is on musculoskeletal, nervous and cardiovascular systems. Prerequisite: BIOL 240 or BIOL 230 or HBIO 230 with a minimum grade of C-. 4 credits.

**HPER-101 Cardio Sculpt**
Exercise emphasizing dance movements. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

**HPER-102 Step Aerobics**
Step aerobics. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

**HPER-103 Body-Mind Fitness**
Workouts emphasizing mindful movements informed by yoga, martial arts, dance, and other modalities. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

**HPER-104 Circuit Training for Women**
Multi-station fitness training with enrollment limited to women. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

**HPER-105 Fitness Walk/Jog**
Exercise emphasizing locomotor activities. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

**HPER-106 Speed, Quickness, and Agility**
Exercise emphasizing rapid anaerobic movements. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

**HPER-107 Swimming**
Aquatic exercise; not for non-swimmers. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

**HPER-108 Weight Training**
Basic resistance training. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

**HPER-109 Tai Chi**
Balance and stability exercise with an Eastern flair. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

**HPER-110 Yoga**
Develops balance, flexibility, and strength. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

**HPER-111 Strength Training for Women**
Resistance training class limited to women. May be repeated for credit. Up to 8 activity credits may count toward the credits required for graduation. Pass/No Pass. 0-1 credit.

**HPER-121 Badminton**
Basic instruction and play. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

**HPER-122 Bowling**
Basic instruction and activity; off campus. Participation fee required. If a student drops or withdraws from the class after some expenses have been accrued the student will be responsible for those expenses. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

**HPER-123 Golf**
Basic instruction and activity; off campus. Participation fee required. The fee is paid to the golf course and is for the use of golf course, rental clubs, and range balls during class times. If a student drops or withdraws from the class after some expenses have been accrued the student will be responsible for those expenses. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

**HPER-124 Handball**
Basic instruction and play. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

**HPER-125 Pickleball**
A tennis-like game played on a smaller indoor court. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

**HPER-126 Racquetball**
Basic instruction and play. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

**HPER-127 Rowing**
Basic instruction and activity; off campus. Participation fee required. If a student drops or withdraws from the class after some expenses have been accrued the student will be responsible for those expenses. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 1 credit.

**HPER-128 Taekwondo**
Basic instruction and training. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

**HPER-129 Tennis**
Basic instruction and play. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

**HPER-130 Ultimate Frisbee**
Basic instruction and play. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

**HPER-131 Volleyball**
Basic instruction and play. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

**HPER-142 Hula**
Basic instruction and performance. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

**HPER-143 Recess**
Various youthful play activities as exercise. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

**HPER-144 Women's Personal Self Defense**
Basic instruction and training. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

**HPER-156 Alpine Skiing**
Instruction and activity at Mt. Hood. Transportation fee (non-refundable) billed to students upon registration. Students will also pay Mt. Hood Meadows directly for the package they select. Prices for the most popular packages are listed in the course schedule; others are available. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

HPER-157  Outdoor Recreation
Day and overnight wilderness outings. Participation fee required. The fee is used for class outings (i.e. transportation, food, campsites and permits). If a student drops or withdraws from the class after some expenses have been accrued the student will be responsible for those expenses. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

HPER-158  Rock Climbing
Basic instruction and in-field activity. Participation fee required. The fee for is used for class outings (i.e. transportation, food, campsites and permits). If a student drops or withdraws from the class after some expenses have been accrued the student will be responsible for those expenses. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

HPER-159  Introduction to Kayaking
White water and coastal sea kayaking for beginners. Participation fee required for class outing costs (e.g., transportation, food, permits). If a student drops or withdraws after some expenses have been accrued, the student will be responsible for those expenses. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

HPER-160  Snowboarding
Instruction and activity at Mt. Hood. Transportation fee (non-refundable) billed to students upon registration. Students will also pay Mt. Hood Meadows directly for the package they select. Prices for the most popular packages are listed in the course schedule; others are available. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit.

HPER-171 – 193: Intercollegiate athletic team membership. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0-1 credit:

HPER-171  Intercollegiate Baseball
HPER-172  Intercollegiate Basketball-M
HPER-173  Intercollegiate Basketball-W
HPER-174  Intercollegiate Cross Country-M
HPER-175  Intercollegiate Cross Country-W
HPER-176  Intercollegiate Football
HPER-177  Intercollegiate Golf-M
HPER-178  Intercollegiate Golf-W
HPER-179  Intercollegiate Lacrosse
HPER-180  Intercollegiate Soccer-M
HPER-181  Intercollegiate Soccer-W
HPER-182  Intercollegiate Softball
HPER-183  Intercollegiate Swimming-M
HPER-184  Intercollegiate Swimming-W
HPER-185  Intercollegiate Tennis-M
HPER-186  Intercollegiate Tennis-W
HPER-187  Intercollegiate Track&Field-M
HPER-188  Intercollegiate Track&Field-W
HPER-189  Intercollegiate Volleyball
HPER-190  Intercollegiate Wrestling-M
HPER-191  Intercollegiate Wrestling-W
HPER-192  Intercollegiate Rowing-W
HPER-193  Intercollegiate Cheerleading