Exercise Science

Philip Schot, Chair; Andrew Alstot, Jennifer Bhalla, Kathryn Faulk, Shawn Henry, Brian Jackson

The mission of the Exercise Science program 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). Toward these ends, students majoring in Exercise Science will pursue an emphasis in either Motor Behavior or Integrative Physiology.

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

<table>
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<tr>
<th>Exercise Science: Core Requirements for the Major</th>
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<tbody>
<tr>
<td>EXMB 200</td>
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<td>BIOL 202</td>
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<td>BIOL 224</td>
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<td>BIOL 240</td>
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<td>MATH 207</td>
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<td>EXMB 105</td>
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<td>EXMB 205</td>
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<td>EXIP 281 or 381</td>
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<td>EXIP 385</td>
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<td>EXIP 399</td>
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<td>EXIP 400</td>
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<td>EXIP 498 &amp; 499</td>
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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.

All students will complete one of the two emphasis areas. 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 clusters of coursework unique to 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.

**INTEGRATIVE PHYSIOLOGY EMPHASIS**

| BIOL 204 | General Biology II | 4 credits |
| CHEM 220 | General Chemistry I | 4 credits |
| CHEM 230 | General Chemistry II | 4 credits |
| PHY 202 | Introductory Physics I (or PHY 232) | 4 credits |

Successfully complete 4 additional credits, chosen in consultation with advisor, which may include but are not limited to:
- EXIP 440 | Advanced Human Anatomy | 4 credits |
- EXIP 385 | Research | 1-4 credits* |
- EXMB 475 | Internship | 1-2 credits* |

**MOTOR BEHAVIOR EMPHASIS**

Successfully complete 12 credits from the following:
- EXMB 315 | Adapted Physical Activity | 2 credits |
- EXMB 333 | Sport Psychology | 4 credits |
- EXMB 336 | Sport in Society | 4 credits |
- EXMB 386 | Human Motor Development | 2 credits |
- EXIP 440 | Advanced Human Anatomy | 4 credits |

Successfully complete 8 additional credits, chosen in consultation with advisor which may include but are not limited to:
- EXMB 303 | Medical Terminology | 1 credit |
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EXMB 313</td>
<td>Strength &amp; Conditioning Methods</td>
<td>2</td>
</tr>
<tr>
<td>EXMB 321</td>
<td>Teaching Physical Activity</td>
<td>2</td>
</tr>
<tr>
<td>EXMB 322</td>
<td>TPA: Group Activities</td>
<td>2</td>
</tr>
<tr>
<td>EXMB 323</td>
<td>TPA: Individual &amp; Dual Activities</td>
<td>2</td>
</tr>
<tr>
<td>EXMB 311</td>
<td>Coaching Methods</td>
<td>2 credits*</td>
</tr>
<tr>
<td>EXMB 312</td>
<td>Coaching Principles</td>
<td>2</td>
</tr>
<tr>
<td>EXMB 413</td>
<td>Adult Fitness Practicum: Boxer Boot Camp</td>
<td>2</td>
</tr>
<tr>
<td>EXMB 475</td>
<td>Internship</td>
<td>1-2 credits*</td>
</tr>
<tr>
<td>EXIP 440</td>
<td>Advanced Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>EXIP 495</td>
<td>Research</td>
<td>1-4 credits*</td>
</tr>
</tbody>
</table>

Both emphases incur a total of 62 credits.

Students may elect to pursue a minor in Exercise Science. The courses used to complete the minor represent both natural and social science perspectives and the structured flexibility ensures a sound foundation and the ability to customize the program to suit one's particular interests.

**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 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.

**MOTOR BEHAVIOR EMPHASIS** (if entering the AT program in 4th year)

The Exercise Science core involves the following substitution options:

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EXIP 399</td>
<td>is replaced with AT 550 – Research Methods</td>
<td>2 credits</td>
</tr>
<tr>
<td>EXIP 400</td>
<td>is replaced with AT 560 – Evidence-Based Practice</td>
<td>2 credits</td>
</tr>
<tr>
<td>EXIP 498 &amp; 499</td>
<td>are replaced with AT 540 &amp; 541 - Clinical Internships</td>
<td>4 credits</td>
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The 12 credits distinctive to Motor Behavior are preserved, with one substitution allowed:

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EXMB 315</td>
<td>Adapted Physical Activity</td>
<td>2</td>
</tr>
<tr>
<td>EXMB 333</td>
<td>Sport Psychology (or AT 520 - Sport Psychology)</td>
<td>4 credits</td>
</tr>
<tr>
<td>EXMB 336</td>
<td>Sport in Society</td>
<td>4</td>
</tr>
<tr>
<td>EXMB 366</td>
<td>Human Motor Development</td>
<td>2</td>
</tr>
<tr>
<td>EXIP 440</td>
<td>Advanced Human Anatomy</td>
<td>4</td>
</tr>
</tbody>
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The 8 flexible credits in Motor Behavior are replaced by 5 credits from the AT program:

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>AT 510</td>
<td>Physical Agents and Mechanical Modalities</td>
<td>3</td>
</tr>
<tr>
<td>AT 531</td>
<td>Prevention and Treatment of Athletic Injuries II</td>
<td>2 credits</td>
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</tbody>
</table>

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

<table>
<thead>
<tr>
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<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 500 &amp; 501</td>
<td>Evaluation &amp; Treatment of Orthopedic &amp; Athletic Injuries</td>
<td>14 credits</td>
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**Exercise Science: Requirements for the Minor**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EXMB 200</td>
<td>Exercise Science Foundations</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 202</td>
<td>General Biology I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 224</td>
<td>Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 240</td>
<td>Human Physiology</td>
<td>4</td>
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Three of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EXIP 281 or 381</td>
<td>Nutrition</td>
<td>4 credits</td>
</tr>
<tr>
<td>EXMB 333</td>
<td>Sport Psychology</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>

**TOTAL: 26 credits**

Students with an interest in coaching may earn a minor to enhance their knowledge to facilitate that pursuit. Exercise Science majors (either emphasis) may not earn a Coaching minor; however, they are free to take courses as electives, subject to institutional limitations.
Coaching: Requirements for the Minor

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EXMB 105</td>
<td>First Aid</td>
<td>1</td>
</tr>
<tr>
<td>EXMB 205</td>
<td>Care &amp; Prevention of Athletic Injuries</td>
<td>2</td>
</tr>
<tr>
<td>EXIP 365</td>
<td>Perceptual Motor Learning</td>
<td>4</td>
</tr>
<tr>
<td>EXMB 311</td>
<td>Coaching Methods</td>
<td>2</td>
</tr>
<tr>
<td>EXMB 312</td>
<td>Coaching Principles</td>
<td>2</td>
</tr>
<tr>
<td>EXMB 333</td>
<td>Sport Psychology</td>
<td>4</td>
</tr>
<tr>
<td>EXMB 336</td>
<td>Sport in Society</td>
<td>4</td>
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TOTAL: 19 credits

Outdoor Leadership Minor

The academic home of the Outdoor Leadership minor is with Exercise Science. The minor is directed by Phil Friesen who also leads Pacific's Outback and Voyages programs. Students interested in this pursuit should consult with him as early as possible. Outdoor Leadership will prepare you to lead others in backpacking, canoeing and sea kayaking or rock climbing. You will learn leadership skills like judgment, group facilitation and risk management that you can use throughout your life.

Outdoor Leadership: Requirements for the Minor

Complete all of the following:
- HPER 157 Outdoor Recreation* 1 credit
- OL 107 Wilderness First Responder* 2 credits
- OL 207 Intro to Outdoor Leadership 2 credits
- OL 307 Applied Outdoor Leadership 4 credits
- OL 407 Outdoor Leadership Seminar 1 credit

Complete one of the following:
- OL 475 Internship 2-4 credits
- OL 395 Independent Study 2-4 credits

Complete one of the following course pairings:
- HPER 158 Rock Climbing 1 credit
  AND
- OL 308 Single Pitch Rock Climbing Instruction 2 credits
  OR
- HPER 199 Coastal Sea Kayaking 1 credit
  AND
- OL 309 Coastal Sea Kayaking Instruction 2 credits

Complete one of the following (Environmental & Sustainability Awareness):
- ENV 260 Oregon Natural History 4 credits
- ENV 321 Environmental Ethics 4 credits
- ENV 200 Intro Environmental Science 4 credits
- POLS 224 Environmental Politics 4 credits
- ECON 333 Environmental Economics 4 credits
- PSY 313 Environmental Psychology 4 credits

Complete one of the following (Working with Diverse Populations):
- EXMB 315 Adapted Physical Activity (cross-listed as DS 315) 2 credits
- SOC 208 Race: Inequality and Identity 4 credits
- GSS 211 Intro Gender and Sexuality Studies 4 credits
- PSY 358 Psychology of Ethnic Diversity in the US 4 credits
- PHIL 240 Human Rights (cross-listed as PSJ 240) 2 credits
- ENGW 202 Writing About Disability 4 credits
- DS 204 Working with People with Disability 4 credits

TOTAL: 18-33 credits*

* Note that the credit range is attributable to course choices used to meet requirements and also the possibility to demonstrate HPER157 and/or OL107 knowledge and skills via non-credit routes.

COURSES

EXIP-255 Special Topics
See department for course description. Credits: 1.00 - 6.00

EXIP-275 Internship
See department for details. Internship contract required. Credits: 1.00 - 4.00

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. Note: Only EXIP 281 or EXIP 381 will count for the EXMB or EXIP major, but not both. 4 credits.
EXIP-295 Ind Study in Integrated Physiology
See department for details. Independent study contract required. Credits: 1.00 - 14.00

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; MATH 125; and EXMB 200 each with minimum grade of C-. 4 credits.

EXIP-355 Special Topics
See department for description. Credits: 1.00 - 6.00

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, FSY-350, or SOC-301), each with a minimum grade of C-. 4 credits.

EXIP-381 Principles of Nutrition
Advanced study of nutrition, including physiological function and metabolic fate of carbohydrates, lipids, proteins, vitamins, minerals, and water. Individual nutritional analysis and a personalized diet plan will be required. Note: Only EXIP 281 or EXIP 381 will count for the EXMB or EXIP major, but not both. Prerequisite (or concurrent enrollment): BIOL 231, BIOL 240, or CHEM 300 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 202; BIOL 231 or BIOL 240; 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. Credits: 1.00 - 6.00

EXIP-399 Junior Seminar
This course introduces students to the primary research literature in the field of Exercise Science. Topics will include procedures for locating sources of information; practice in assessing research reports; introduction to various types of research methodologies (e.g., quantitative, qualitative, reviews, meta-analysis); training in human subject ethics and the Institutional Review Board process; and writing skills relevant to scientific reporting. Prerequisite: Declared Exercise Science major; EXMB-200; BIOL-224; BIOL-240; and 2 of the following courses: EXIP-345, EXIP-365, EXIP-385, EXMB-318, EXMB-333, EXMB-336, MATH-207, FSY-350 or SOC-301. All specific prerequisite courses must be completed with a minimum grade of C-. Pass/No Pass. 1 credit.

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 318, EXMB 333, or EXMB 336. Instructor's consent required. 2 credits.

EXIP-440 Advanced Human Anatomy and Lab
Advanced study of gross and histological structure of the human body. Introduction into musculoskeletal, nervous and cardiovascular systems. Prerequisite: BIOL 224 or BIOL 230 with a minimum grade of C-. 4 credits.

EXIP-455 Special Topics
See department for course description. Credits: 1.00 - 6.00

EXIP-495 Independent Research
Faculty supervised, student-conducted research activities. May be repeated for new/continuing projects. Independent study contract required. Credits: 1.00 - 4.00

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. Credits: 1.00 - 14.00

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
See department for course description. Credits: 1.00 - 6.00

EXMB-275 Internship
See department for details. Internship contract required. Credits: 1.00 - 4.00

EXMB-295 Independent Study in Motor Behavior
See department for details. Independent study contract required. Credits: 1.00 - 14.00

EXMB-303 Medical Terminology
This course is designed to provide students with an understanding of the terminology 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 202 with a minimum grade of C-. 1 credit.

EXMB-311 Coaching Methods
Series of individual courses designed to give students insight and direction in leading or assisting in the coaching of athletics. Sports represented rotate and vary depending on instructor availability. Prerequisite: EXMB-105. May be repeated for credit for different sports. 2 credits.

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 355 with minimum grade of C. Recommended: EXIP 345. 2 credits.

EXMB-315 Adapted Physical Activity
Introduction to adapted, corrective, and developmental physical activities. Emphasis is placed on assessment, laws & legislation, and teaching methods of physical activities for the exceptional student. Also listed as DS 315. Prerequisite: EXMB-105, and EXIP 365 with a minimum grade of C- or DS 200 with a minimum grade of C-. 2 credits.

EXMB-318 Teaching Physical Activity I
Content will focus on generally applicable instructional and class management strategies for physical activity settings such as: design of instructional materials, techniques and planning for implementation; evaluation; approaches for working with a variety of learners. Prerequisite: EXIP-365 with minimum grade of C-. 4 credits.

EXMB-319 Teaching Physical Activity II
On site lab/application opportunity for students to design and deliver physical education instruction to elementary school children. Prerequisite: EXMB-318 with a minimum grade of C- and EXMB-105. Instructor's consent required. 2 credits.

EXMB-321 Teaching Physical Activity I
Content will focus on generally applicable instructional techniques as well as class and behavior management strategies for individual, dual, and group physical activity settings, including: design of developmentally appropriate instructional materials, assessment of learning and instructional behaviors; approaches for working with a variety of learners. Prerequisite: EXIP 365. 2 credits.

EXMB-322 TPA: Group Activities
Content will focus on evidence-based instructional methods, class and behavior management techniques, and planning and application of instructional strategies that are specific to group physical activities. An emphasis will be placed on implementing effective instruction of developmentally appropriate group-oriented physical activities. Prerequisite: EXMB 321 with minimum grade C-; and EXMB 105 or OL 107. 2 credits.

EXMB-323 TPA: Individual & Dual Activities
Content will focus on evidence-based instructional methods, behavior management techniques, and planning and application of instructional strategies that are specific to individual and dual physical activities. An emphasis will be placed on the implementation of developmentally appropriate physical activity instruction of individual and dual activities for singular learners or groups of learners. Prerequisite: EXMB 321 with minimum grade C-; and EXMB 105 or OL 107. 2 credits.
EXMB-333 Sport Psychology
Course examines the psychological dimensions of athletic performance and participation. Topics will include research and application in the areas of motivation, confidence, psychological skills training, stress management, communication, burnout, youth sport, and exercise adherence. Prerequisite: EXMB-200 with minimum grade C- or PSY 150 with minimum grade C-. 4 credits.

EXMB-336 Sport and Society
Investigation of sport as a social phenomenon in small groups, organizations, sub-cultures, and institutions. Emphasis is on interscholastic and intercollegiate sport programs. Prerequisite: Junior standing or above (60 or more completed credits). 4 credits.

EXMB-355 Special Topics
See department for course description. Credits: 1.00 - 6.00

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 385 with minimum grade C-. 2 credits.

EXMB-395 Independent Study
See department for details. Independent study contract required. Credits: 1.00 - 6.00

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 or EXIP 381; and EXIP 385 and EXMB 313. Instructor's consent required. Pass/No Pass. 2 credits.

EXMB-455 Special Topics
See department for course description. Credits: 1.00 - 6.00

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. Credits: 1.00 - 14.00

EXMB-495 Independent Research
See department for details. Independent study contract required. Credits: 1.00 - 6.00

HPER-101 Dance Aerobics
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. 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. 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. 1 credit.

HPER-104 Circuit Training
Multi-station fitness training. 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-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. 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. 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. 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. 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. 1 credit.
HPER-110 Power Hour
High-intensity training emphasizing explosiveness and power. 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-111 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. 1 credit.

HPER-113 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. 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. 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. 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. To the golf course for 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-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. 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. 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. 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. 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. 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. 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. 1 credit.

HPER-141 Gardening
Gardening is exercise at B Street Permaculture Center. 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-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. 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. 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. 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. 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. 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. 1 credit.

HPER-159 Sea Kayaking
Basic instruction and in-field activity: off campus. 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. 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. 1 credit.

HPER-171 Varsity Baseball
Varsity 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-172 Varsity Men's Basketball
Varsity 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-173 Varsity Women's Basketball
Varsity 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-174 Varsity Men's Cross Country
Varsity 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-175 Varsity Women's Cross Country
Varsity 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-176 Varsity Football
Varsity 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-177 Varsity Men's Golf
Varsity 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-178 Varsity Women's Golf
Varsity 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-179 Varsity Lacrosse
Varsity 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-180 Varsity Men's Soccer
Varisty 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-181 Varsity Women's Soccer
Varisty 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-182 Varsity Softball
Varisty 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-183 Varsity Men's Swimming
Varisty 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-184 Varsity Women's Swimming
Varisty 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-185 Varsity Men's Tennis
Varisty 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-186 Varsity Women's Tennis
Varisty 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-187 Varsity Men's Track & Field
Varisty 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-188 Varsity Women's Track & Field
Varisty 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-189 Varsity Volleyball
Varisty 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-190 Varsity Men's Wrestling
Varisty 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-191 Varsity Women's Wrestling
Varisty 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-193 Varsity Cheerleading
Varisty cheerleading team membership. May be repeated for credit. Up to 8 activity credits may count toward the 124 credits required for graduation. Pass/No Pass. 0.5-1 credit.

OL-107 Wilderness First Responder
Through lecture, lab and practical application, students will be introduced to the necessary skills for assessing and treating common medical problems in remote settings. The methods and common practices for wilderness medicine introduced in this course give students both a competency for treating injuries and illness and the experience that improves judgment which may prevent potential incidents. Successfully completing this course also offers a two year certification by the Wilderness Medicine Training Center. Additional course fees apply. Pass/No Pass. 2 credits.

OL-195 Independent Study
See department for details. Independent study contract required. Credits: 1.00 - 6.00

OL-207 Introduction to Outdoor Leadership
Introduction to the principles and practices of leading others outdoors. Focus on effective outdoor living skills, communication skills, understanding what a functional group looks like, facilitating group debriefs and having fun outdoors. Students will learn how to teach the following outdoor living skills using experiential education pedagogy: cooking, shelter building, weather prediction, navigation, equipment use & maintenance, clothing selection, travel techniques and health & sanitation. The instructor will model planning and effectively implementing the logistics for leading a weekend outdoor excursion. This class is for anyone interested in developing basic outdoor leadership skills. 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. Prerequisite: HPER 157. 2 credits.
OL-307 Applied Outdoor Leadership
The focus of this course is on developing students' judgment, decision making and critical thinking skills so that they can more effectively lead others on outdoor trips. Examination of case studies and student-led trips with instructor supervision to increase students' ability to handle challenging outdoor leadership experiences. Course will develop student's Risk Management, Planning & Logistics, Leadership, Environmental Integration and Education skills. Content also includes facilitating challenging experiences and decision making with groups. There will be three weekend outdoor trips where all of these skills are applied. 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. Prerequisites: OL 207 with minimum grade C-; 4 credits.

OL-308 Single Pitch Rock Instructor
Students will develop their ability to lead single pitch sport climbs and traditional climbs. Students will learn how to manage the group climbing site, teach climbing movement, build traditional anchors, rappel, clean routes and coach trip participants. Prerequisite: Pass HPER-158 and OL-107, and complete OL-207 with minimum grade of C-. 2 credits.

OL-309 Coastal Sea Kayaking Instructor
This course builds on the fundamentals of sea kayaking skills and introduces the student to group management on the water and navigation in more challenging waters. Mastery of chart and compass use, boat handling skills, multiday trip planning, and an Eskimo roll are also addressed. Previous sea kayaking experience required. Prerequisite: Pass HPER-159 and OL-107; and complete OL-207 with minimum grade of C-. 2 credits.

OL-395 Independent Study
See department for details. Independent study contract required. Credits: 1.00 - 6.00

OL-407 Outdoor Leadership Seminar
This course will help students synthesize the principles, practices, theories, ethics and philosophy presented throughout the pursuit of the Outdoor Leadership minor. It will also look at how leadership skills learned in the minor can be applied to future professions in the outdoors and within other careers. 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. Prerequisite: OL 307 with minimum grade C-. 1 credit.

OL-475 Internship
See department for details. Internship contract required. Credits: 1.00 - 14.00