Bachelor of Science with a Major in Exercise Science, Pre-Physical Therapy Concentration

Program Director: B. Westerman

The bachelor of science with a major in exercise science degree program prepares individuals for careers in medicine and other health-related professions including athletic training/sports medicine, physical therapy, physician’s assistant or nursing, exercise physiology and rehabilitation, sport psychology as well as fitness and health promotion.

Students in the exercise science major may select the pre-medical professional concentration (for those planning to enter a medical, physician assistant, or nursing program upon graduation), the pre-physical therapy concentration, or the pre-athletic training/sports medicine concentration. The exercise science major may also be taken without a concentration.

REQUIREMENTS

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td></td>
<td><strong>University General Education Requirement</strong></td>
<td></td>
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<tr>
<td>UW 1020</td>
<td>University Writing</td>
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<tr>
<td>or HONR 1015</td>
<td>Honors Seminar: UW 1020: Origins and Evolution of Modern Thought</td>
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<td></td>
<td>Two writing in the disciplines (WID) courses (may also be counted in another category).</td>
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<td></td>
<td>One critical or creative analysis in the humanities course.</td>
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<td></td>
<td>One quantitative reasoning course. For exercise science and nutrition science majors, must be satisfied with one of the following: STAT 1051, STAT 1053, STAT 1127, or PUBH 2142.</td>
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<td></td>
<td>One scientific reasoning course with laboratory experience. For exercise science and nutrition science majors, must be satisfied with BISC 1111.</td>
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<tr>
<td></td>
<td>Two critical, creative, or quantitative analysis in the social sciences courses. For exercise science and nutrition science majors, must be satisfied with one of the following: ANTH 1002, ANTH 1003, or ANTH 1004; and one of the following: COMM 1040 or COMM 1041.</td>
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<tr>
<td></td>
<td>Information about approved courses can be found on the University General Education Requirements (<a href="http://bulletin.gwu.edu/university-regulations/general-education/">http://bulletin.gwu.edu/university-regulations/general-education/</a>) page.</td>
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**Exercise science core requirements**

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>EXNS 1103</td>
<td>Professional Foundations in Exercise Science</td>
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<tr>
<td>EXNS 1110</td>
<td>Applied Anatomy and Physiology I</td>
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</tr>
<tr>
<td>EXNS 1111</td>
<td>Applied Anatomy and Physiology II</td>
<td></td>
</tr>
<tr>
<td>EXNS 2111</td>
<td>Exercise Physiology I</td>
<td></td>
</tr>
<tr>
<td>EXNS 2112</td>
<td>Exercise Physiology II</td>
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</tr>
<tr>
<td>EXNS 2113</td>
<td>Kinesiology</td>
<td></td>
</tr>
<tr>
<td>EXNS 2116</td>
<td>Exercise and Health Psychology</td>
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<tr>
<td>EXNS 2119</td>
<td>Introduction to Nutrition Science</td>
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<tr>
<td>EXNS 3110</td>
<td>Field Experience - Exercise and Nutrition Sciences (taken for 2 credits)</td>
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<tr>
<td>EXNS 4110</td>
<td>Current Issues in Exercise Science</td>
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<tr>
<td>PSYC 1001</td>
<td>General Psychology</td>
<td></td>
</tr>
<tr>
<td>PUBH 1101</td>
<td>Introduction to Public Health and Health Services</td>
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Course requirements also fulfilling University General Education Requirements (13 credits)

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<tr>
<th>Code</th>
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<tbody>
<tr>
<td>ANTH 1002</td>
<td>Sociocultural Anthropology</td>
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<tr>
<td>or ANTH 1003</td>
<td>Archaeology</td>
<td></td>
</tr>
<tr>
<td>or ANTH 1004</td>
<td>Language in Culture and Society</td>
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<tr>
<td>BISC 1111</td>
<td>Introductory Biology: Cells and Molecules</td>
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<tr>
<td>COMM 1040</td>
<td>Public Communication</td>
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<tr>
<td>or COMM 1041</td>
<td>Interpersonal Communication</td>
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<tr>
<td>STAT 1051</td>
<td>Introduction to Business and Economic Statistics</td>
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</tr>
<tr>
<td>or STAT 1053</td>
<td>Introduction to Statistics in Social Science</td>
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<tr>
<td>or STAT 1127</td>
<td>Statistics for the Biological Sciences</td>
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</tr>
<tr>
<td>or PUBH 2142</td>
<td>Introduction to Biostatistics for Public Health</td>
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**Pre-physical therapy concentration requirements**

1 Bachelor of Science with a Major in Exercise Science, Pre-Physical Therapy Concentration
### Required (26 credits)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BISC 1112</td>
<td>Introductory Biology: The Biology of Organisms</td>
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</tr>
<tr>
<td>CHEM 1111</td>
<td>General Chemistry I</td>
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<tr>
<td>CHEM 1112</td>
<td>General Chemistry II</td>
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<tr>
<td>MATH 1220</td>
<td>Calculus with Precalculus I</td>
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<tr>
<td>PHYS 1011</td>
<td>General Physics I</td>
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</tr>
<tr>
<td>PHYS 1012</td>
<td>General Physics II</td>
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</tr>
<tr>
<td>PSYC 2011</td>
<td>Abnormal Psychology</td>
<td></td>
</tr>
<tr>
<td>or PSYC 2013</td>
<td>Developmental Psychology</td>
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### Electives

14 credits of guided electives planned with the advisor and 18 credits of general electives.

### Exercise science guided electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>ANTH 1005</td>
<td>The Biological Bases of Human Behavior</td>
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<tr>
<td>ANTH 2502</td>
<td>Anthropology of Science and Technology: Twenty-First Century Brave New Worlds</td>
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<tr>
<td>ANTH 3413</td>
<td>Evolution of the Human Brain</td>
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<tr>
<td>ANTH 3504</td>
<td>Illness, Healing, and Culture</td>
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<tr>
<td>BIOC 3261</td>
<td>Introductory Medical Biochemistry</td>
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<tr>
<td>BIOC 3262</td>
<td>Biochemistry Laboratory</td>
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<tr>
<td>BIOC 3560</td>
<td>Diet, Health, and Longevity</td>
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<tr>
<td>BISC 1112</td>
<td>Introductory Biology: The Biology of Organisms</td>
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<tr>
<td>BISC 2202</td>
<td>Cell Biology</td>
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<tr>
<td>BISC 2207</td>
<td>Genetics</td>
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<td>BISC 2208</td>
<td>Genetics Laboratory</td>
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<tr>
<td>BISC 2213</td>
<td>Biology of Cancer</td>
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<td>BISC 2214</td>
<td>Developmental Biology</td>
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<td>BISC 2220</td>
<td>Developmental Neurobiology</td>
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<td>BISC 2320</td>
<td>Neural Circuits and Behavior</td>
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<tr>
<td>EXNS 1112</td>
<td>Current Issues in Coaching</td>
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<tr>
<td>EXNS 1113</td>
<td>Medical Terminology</td>
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<td>EXNS 1117</td>
<td>Principles of Coaching</td>
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<tr>
<td>EXNS 1118</td>
<td>Sport and Nutrition</td>
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<tr>
<td>EXNS 1119W</td>
<td>Children and Sport</td>
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<tr>
<td>EXNS 1199</td>
<td>Topics in Exercise and Nutrition Sciences</td>
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<tr>
<td>EXNS 2110</td>
<td>Injury Prevention and Control</td>
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<tr>
<td>EXNS 2117</td>
<td>Sport Psychology</td>
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<td>Sport Psychology</td>
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<tr>
<td>EXNS 2120</td>
<td>Assessment of Nutritional Status</td>
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<td>EXNS 2121</td>
<td>Orthopedic Taping and Bracing</td>
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<td>EXNS 2122</td>
<td>Food Systems in Public Health</td>
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<td>EXNS 2123</td>
<td>Nutrition and Chronic Disease</td>
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<tr>
<td>EXNS 2124</td>
<td>Lifecycle Nutrition</td>
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<td>EXNS 3101</td>
<td>Independent Study</td>
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<tr>
<td>EXNS 3102</td>
<td>Applied Sport Psychology</td>
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<td>EXNS 3110</td>
<td>Field Experience - Exercise and Nutrition Sciences (Credits taken beyond those required for graduation)</td>
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<tr>
<td>EXNS 3111W</td>
<td>Exercise and Nutrition Sciences Research Methods</td>
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<td>Injury Assessment</td>
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<td>EXNS 3118</td>
<td>Therapeutic Modalities in Sports Medicine</td>
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<td>Therapeutic Exercise in Sports Medicine</td>
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<td>EXNS 3121</td>
<td>Medical Issues in Sports Medicine</td>
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<td>Psychology of Injury and Rehabilitation</td>
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<td>HLWL 1101</td>
<td>Special Topics</td>
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<td>Stress Management</td>
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<td>HLWL 1103</td>
<td>Issues in Men's Health</td>
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<td>HLWL 1104</td>
<td>Outdoor and Environmental Education</td>
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<td>HLWL 1106</td>
<td>Drug Awareness</td>
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<td>HLWL 1108</td>
<td>Weight and Society</td>
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<td>HLWL 1109</td>
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<td>Issues in Alternative Medicine</td>
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<td>Issues in Women's Health</td>
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<td>Personal Health and Wellness</td>
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<td>HSCI 2100</td>
<td>Writing and Composition in the Health Sciences</td>
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<td>Psychosocial Aspects of Health and Illness</td>
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<td>HSCI 2110</td>
<td>Disease Prevention and Health Promotion Concepts</td>
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<td>PSYC 2570</td>
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<td>PSYC 3128</td>
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<tr>
<td>PUBH 1102</td>
<td>History of Public Health</td>
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<td>PUBH 2110</td>
<td>Public Health Biology</td>
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<td>PUBH 2112</td>
<td>Principles of Health Education and Health Promotion</td>
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<td>PUBH 2113</td>
<td>Impact of Culture upon Health</td>
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<td>PUBH 2117</td>
<td>Service Learning in Public Health</td>
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<tr>
<td>PUBH 3130</td>
<td>Health Services Management and Economics</td>
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<td>PUBH 3131</td>
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<tr>
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*Some University General Education requirements will count for both General Education and Exercise Science Core requirements. See program guide.*