Exercise Science

All Exercise Science majors complete a common block of coursework and an emphasis area. A rigorous, analytical, systematic and evidence-based context permeates the curriculum, culminating with the required research component. Integrative Physiology (EXIP) emphasizes natural science perspectives and includes additional coursework from the parent natural science disciplines. Motor Behavior (EXMB) accentuates behavioral science perspectives related to human movement. Classes not in one’s emphasis can be taken as electives and crossover is very common. Courses with the EXIP prefix meet Natural Science core requirements. Both routes, with strategic selection of other courses, will serve students with aspirations to pursue graduate study in health professions, education, science or employment.

<table>
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<tr>
<th>Exercise Science Core Coursework</th>
<th>Emphasis Differentiation</th>
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<tbody>
<tr>
<td>EXMB 200 Exercise Science Foundations</td>
<td>BIOL 204 General Biology II with Lab</td>
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<tr>
<td>B IOL 202 General Biology I with Lab</td>
<td>CHEM 220 General Chemistry I with Lab</td>
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<tr>
<td>B IOL 224 Human Anatomy with Lab</td>
<td>CHEM 230 General Chemistry II with Lab</td>
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<tr>
<td>B IOL 240 Human Physiology with Lab</td>
<td>PHY 202 Introductory Physics I with Lab (or PHY 232)</td>
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<tr>
<td>Statistics MATH 207 or PSY 350 or SOC 301</td>
<td>Plus 4 additional approved upper division credits</td>
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<tr>
<td>EXMB 105 First Aid</td>
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<tr>
<td>EXMB 205 Care &amp; Prevention of Athletic Injuries</td>
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<tr>
<td>EXIP 281 or 381 Nutrition</td>
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<tr>
<td>EXIP 345 Biomechanics with Lab</td>
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<tr>
<td>EXIP 365 Perceptual Motor Learning</td>
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<tr>
<td>EXIP 385 Exercise Physiology with Lab</td>
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<tr>
<td>Research Component</td>
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<td>EXIP 399 Junior Seminar</td>
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<td>EXIP 400 Advanced Analysis in Kinesiology</td>
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<tr>
<td>EXIP 498 Senior Research I</td>
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<tr>
<td>EXIP 499 Senior Research II</td>
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</table>

Exercise Science also offers two minors (Human Movement Studies and Exercise Science) that in many ways parallel the EXMB and EXIP paths. Given prerequisite sequences and frequency of offerings, student must begin work fairly early on and plan ahead.

<table>
<thead>
<tr>
<th>HUMAN MOVEMENT STUDIES MINOR</th>
<th>EXERCISE SCIENCE MINOR</th>
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<tbody>
<tr>
<td>EXMB 200 Exercise Science Foundations</td>
<td>EXMB 200 Exercise Science Foundations</td>
</tr>
<tr>
<td>EXMB 333 Psychology of Human Movement</td>
<td>BIOL 202 General Biology I with Lab</td>
</tr>
<tr>
<td>EXIP 335 Sociology of Human Movement</td>
<td>BIOL 224 Human Anatomy with Lab</td>
</tr>
<tr>
<td>16 additional credits from EXIP or EXMB</td>
<td>BIOL 240 Human Physiology with Lab</td>
</tr>
</tbody>
</table>

Special note for TRANSFER students and students changing majors to ExSci:

To be a “true” junior-level ExSci major, you must minimally have completed the Human A&P (with lab) sequence and math through PreCalculus, but this still may not be enough to enable one to complete this major in two years. Ideally, all of the introductory biology, chemistry, and physics coursework would be completed. Without A&P and math completed, a student is functionally a sophomore.

For students with A&P and math prerequisites completed, enrollment in EXMB 200 and EXIP 385 during the first (“junior”) fall term is strongly preferred, and the schedule should also include other ExSci courses for which the student is eligible. EXIP 345 and 365 and 399 (if eligible) should be taken the following spring.
CRITICAL CONSIDERATIONS

- **Prerequisite sequences:**
  - Chemistry I/II, Physics I/II, and Anatomy & Physiology (A&P) are Fall-Spring only
  - Biology I/II are Spring-Fall only
  - EXMB 200, 105, 205, 303, and EXIP 281, 345, 365, & 385 are offered both terms
  - EXMB 315, 366, 333, & 336, and EXIP 381, 399, & 440 are offered every spring only
  - EXMB 321 (with 322/323 alternating) and EXIP 400 are offered every fall only

- **Major or minor declaration:**
  - Do this early. We need this information for a great many things

- **Capstone eligibility prerequisites:**
  - EXIP 399: BIOL240; 3 of EXIP345, 365, 385; EXMB 322, 323, 333, 336, Statistics
  - EXIP 400: EXIP 399, EXMB105 or OL107, 3 of EXIP345, 365, 385; EXMB 322, 323, 333, 336

- **Closed courses:**
  - If you really want to take the course that term, do get onto the waitlist. Then, contact the instructor to politely inquire about the chances space will open up. If the waitlist is huge, we often can add a section, but we must have the waitlist information to justify it. Do not get on a waitlist and then wait, however.

- **Core coursework:**
  - Core classes are taken across all of your years of study, not all at the beginning. Generally, core classes are sprinkled in amongst required courses every semester.

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 in the Motor Behavior emphasis and available only to students accepted to the highly selective AT program.

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 Exercise Science-Motor Behavior degree. These students are required to deliver a formal public presentation overview of their first year clinical internship experiences to complete the A&S Capstone requirement. 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.
## Exercise Science

Find the column for the desired emphasis and math placement level combination, and follow it down through the 4 years! **Bolded courses are essential to complete in the terms shown.**

<table>
<thead>
<tr>
<th>Term</th>
<th>Integrative Physiology</th>
<th>Motor Behavior</th>
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<tbody>
<tr>
<td></td>
<td>EXIP-M1</td>
<td>EXMB-M1</td>
</tr>
<tr>
<td></td>
<td>EXIP-M2</td>
<td>EXMB-M2</td>
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<tr>
<td></td>
<td>EXIP-M3</td>
<td>EXMB-M3+</td>
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</tbody>
</table>

- M1/M2/M3 refer to math placements. M1s must take MATH122. M2s must take MATH123. M3s are required only to take Statistics for the major.

- C/M/P/E refers to a course that meets requirements for core [including Focal Study, CE and/or IDP] or major/minor or prerequisite(s) or, if all requirements are completed and you need credits, a pure elective!

**Fr Fall**
- HUM100
- EXMB200
- MATH112
- CHEM220
- C/M/P/E
- HPE190

**Winter**
- C/M/P/E
- C/M/P/E
- C/M/P/E
- C/M/P/E
- C/M/P/E

**Fr Spring**
- BIOL202
- BIOL202
- BIOL202
- BIOL202
- BIOL202

**So Fall**
- BIOL240
- CHEM230
- EXIP-3xx
- 2x(C/M/P/E)

**So Spring**
- BIOL240
- CHEM230
- EXIP-3xx
- 2x(C/M/P/E)

**BiOl224, MATH125 and EXMB200 MUST BE COMPLETED BEFORE SOPHOMORE FALL!**

**BiOl224/240 is critical this year! On-pace majors are eligible for: EXMB105/205; EXIP281; MATH207; PYS350; SOC301 & PHYS202. Taking EXIP365 or EXMB333 or EXMB336 may be available for strong, gung-ho students.**

**Take your 1st upper division EXIP course (EXIP3xx) no later than now! This generally will be EXIP345 or EXIP365 or both. For EXMB, it would be good to take EXMB333 or EXMB336 along with EXIP345 or EXIP365. Consider also EXMB105/205; EXMB315/366; EXIP440; EXIP281; MATH207; PYS350; SOC301**

**BiOl224, BiOl240 and at least one upper division EXIP course MUST BE COMPLETED BEFORE JUNIOR FALL!**

**All ExSo majors should be eligible for EXIP385 by junior fall and aim to complete it this year. Generally, all should complete EXIP345 and/or EXIP365 this year, also. EXIP majors often take the PHYSICS sequence, JR or SR year. Be certain to be eligible for EXIP399 next term; the prerequisites are specific and extensive!**

**The critical class is Seminar (EXIP399). Be certain to finish all EXIP400 prerequisites this term, too.**

**EXIP & EXMB are now identical!**

**Sr Fall**
- EXIP400
- 2x(C/M/P/E)

**Winter**
- EXIP498

**Sr Spring**
- EXIP499
- C/M/P/E

**EXMB/ATC**

**ATC Program**

**The big one now is Advanced Analysis (EXIP400). If not already completed, students should be in Statistics. EXIP majors need to remember PHYSICS. Generally, EXIP488/499 are taken consecutively (e.g., F/W, F/S or W/S). Finish capstone work, report your findings on Senior Project Day, complete remaining classes to meet all your various goals.**