Exercise Physiology, A.A.

Degree Offered
• Associate of Arts

Nature of the Program
The associate of arts degree in exercise physiology program provides the first two years of the bachelors degree program. Exercise physiology is the study of biological and biochemical processes associated with exercise and overload that affects the underlying function of cells and organ systems in the human body. Upon transfer into and completion of a bachelors program in exercise physiology, student can enter the workforce or apply to various graduate programs.

The bachelors degree program in exercise physiology at WVU has 3 areas of emphasis: aquatic therapy, dance science and health professions that students can choose to select from. The health profession emphasis helps prepare students to apply to a Doctorate in Physical Therapy (DPT) program, a Doctorate of Occupational Therapy (DOT) program, medical school, dental school, and/or a physicians assistant program.

The exercise physiology AA program provides a foundation in biology, math, physics, physiology, and psychology required for admission into and success in the exercise physiology bachelors program within the WVU School of Medicine. Students planning to apply to other exercise physiology programs should determine admission requirements and transfer equivalencies for the courses offered at Potomac State College and the institution they plan to attend.

Career Opportunities
Exercise physiologists work to prevent or delay the onset of chronic disease in healthy participants or to provide therapeutic or functional benefits to patients with known disease. Services may be offered in a variety of medical settings such as hospitals, rehabilitation centers, and out-patient clinics; in community, corporate, commercial, and university fitness and wellness centers; in nursing homes and senior citizens centers; as well as in research and academic settings.

Exercise physiologists are trained to evaluate people in the areas of cardiovascular fitness, muscular strength and endurance, flexibility, neuromuscular integration, and body composition. They are also trained to provide exercise programs based on the results of these evaluations that are designed to increase the functional capacity of the participants.

Exercise physiologists work with athletes, patients, and healthy participants in the areas of disease prevention in wellness programs or rehabilitation in hospital settings. The bachelor of science program is a preparatory program for graduate school. Graduates of this program continue their studies in exercise physiology, physical therapy, medicine, or other health-related careers. Graduates of the master of science or doctoral program find employment in corporate wellness, hospital rehabilitation, higher education, or other research settings.

FACULTY
CHAIR
• Vicki Huffman - Ph.D. Biomedical Science
  Year @ PSC (2005)

ADVISORS
• Candace Lawrence - M.A. Math
  Year @ PSC (2017)

General Education Foundations
Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef/)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations
<table>
<thead>
<tr>
<th>F1 - Composition &amp; Rhetoric</th>
<th>3-6</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 &amp; ENGL 102 or ENGL 103</td>
<td>Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research Accelerated Academic Writing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>F2A/F2B - Science &amp; Technology</th>
<th>4-6</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>F3 - Math &amp; Quantitative Reasoning</td>
<td>3-4</td>
</tr>
<tr>
<td>F4 - Society &amp; Connections</td>
<td>3</td>
</tr>
<tr>
<td>F5 - Human Inquiry &amp; the Past</td>
<td>3</td>
</tr>
<tr>
<td>F6 - The Arts &amp; Creativity</td>
<td>3</td>
</tr>
<tr>
<td>F7 - Global Studies &amp; Diversity</td>
<td>3</td>
</tr>
<tr>
<td>F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)</td>
<td>9</td>
</tr>
<tr>
<td>Total Hours</td>
<td>31-37</td>
</tr>
</tbody>
</table>

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

## Curriculum Requirements

**ENGL 101**
- Introduction to Composition and Rhetoric
  - ENGL 102
  - Introduction to Composition, Rhetoric, and Research (GEF 1)

**EXPH 101**
- Introduction to Exercise Physiology

**EXPH 364**
- Kinesiology

**PALM 200**
- Medical Terminology
  - or EXPH 240
  - Medical Terminology

**MATH 124**
- Algebra with Applications (or higher - GEF 3)
  - or MATH 155
  - Calculus 1

**MATH 128**
- Plane Trigonometry
  - or MATH 129
  - Pre-Calculus Mathematics
  - or MATH 155
  - Calculus 1

**STAT 211**
- Elementary Statistical Inference

**BIOL 101**
- General Biology 1
  - BIOL 101L
  - and General Biology 1 Laboratory (GEF 2)

**BIOL 102**
- General Biology 2
  - BIOL 102L
  - and General Biology 2 Laboratory

**CHEM 115**
- Fundamentals of Chemistry 1
  - or CHEM 115L
  - and Fundamentals of Chemistry 1 Laboratory (GEF 8)

**CHEM 116**
- Fundamentals of Chemistry 2
  - or CHEM 116L
  - and Fundamentals of Chemistry 2 Laboratory (GEF 8)

**HN&F 171**
- Introduction to Human Nutrition

**PHYS 101**
- Introductory Physics 1
  - or PHYS 101L
  - and Introductory Physics 1 Laboratory

**PHYS 102**
- Introductory Physics 2
  - or PHYS 102L
  - and Introductory Physics 2 Laboratory

**PSIO 241**
- Elementary Physiology

**PSYC 101**
- Introduction to Psychology (GEF 4)

**PSYC 241**
- Introduction to Human Development

**WVUE 191**
- First Year Seminar

**Total Hours**

60

*If students choose to take EXPH 240, they will need to take an additional 2 credit hours of electives in order to meet the total 60 credit hour program requirement.*

## Suggested Plan of Study

### First Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>3</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>BIOL 101</td>
<td></td>
<td>ENGL 101 (GEF 1)</td>
<td>3</td>
</tr>
<tr>
<td>&amp; 101L (GEF 2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC 101 (GEF 4)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please consult with your advisor or academic department regarding the GEF course offerings available at your campus.
<table>
<thead>
<tr>
<th>Course</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 124 (GEF 3)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HN&amp;F 171</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>WVUE 191</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>PALM 200 or EXPH 240</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 115 &amp; 115L (GEF 8)</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 102 (GEF 1)</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 101 &amp; 101L (GEF 8)</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>EXPH 364</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>STAT 211</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total credit hours: 60

**Major Learning Outcomes**

**EXERCISE PHYSIOLOGY**

Upon completion of the associates in exercise physiology program, students will be able to:

1. Identify physiological, molecular, cellular and integrative systems concepts in exercise physiology.
2. Relate and apply mathematical and physics concepts to how the body moves and functions.
3. Use chemical principles and laboratory techniques to describe and analyze the chemical structure.
4. Transfer into a bachelor degree program in exercise physiology.