## University of Washington Bothell Curriculum — Physics (BA)

### Prerequisites: 25 credits

- **STMATH 124: Calculus I** 5
- **STMATH 125: Calculus II** 5
- **BPHYS 121: Mechanics** 5
- **BPHYS 122: Electromagnetism and Oscillatory Motion** 5
- **BPHYS 123: Waves** 5

### Additional Mathematics: 10 credits

- **STMATH 126: Calculus III** 5
- **STMATH 207: Differential Equations** 5

### General Chemistry: 6 credits

- **BCHEM 143: General Chemistry** 4
- **BCHEM 144: General Chemistry lab** 2

### Physics Core: 26 credits

- **BPHYS 221: Classical Mechanics** 5
- **BPHYS 222: Modern Physics** 5
- **BPHYS 224: Thermal Physics** 5
- **BPHYS 433: Senior Project** 5
- **BPHYS 484: Physics, Society, and Industry** 5
- **BPHYS 494: Seminar** 1

### Physics Electives: 10 credits (some electives require math beyond STMATH 207)

- **BPHYS 231: Introduction to Experimental Physics** 3
- **BPHYS 293: Special Topics in Physics** 5
- **BPHYS 311: Astrophysics I** 5
- **BPHYS 312: Astrophysics II** 5
- **BPHYS 314: Introduction to Cosmology** 5
- **BPHYS 317: Mathematical Physics** 5
- **BPHYS 321: Electricity and Magnetism I** 5
- **BPHYS 322: Electricity and Magnetism II** 5
- **BPHYS 323: Electricity and Magnetism III** 5
- **BPHYS 324: Quantum Mechanics I** 5
- **BPHYS 325: Quantum Mechanics II** 5
- **BPHYS 328: Statistical Physics** 5
- **BPHYS 431: Experimental Physics Lab I** 5
- **BPHYS 432: Experimental Physics Lab II** 5
- **BPHYS 441: Condensed Matter Physics I** 5
- **BPHYS 450: Computational Physics & Theoretical Modeling** 5
- **BPHYS 493: Advanced Topics in Physics** 5
- **BPHYS 498: Independent Study** 1-5
- **BPHYS 499: Research** 1-5

### General Education Requirements

#### Composition/Additional Writing (C/W): 15 credits

- Composition (B WRIT 134 or equivalent) 5
- Additional Writing (W course of your choice) 5
- Additional Writing (fulfilled with BPHYS 484) 5 x

#### Arts & Humanities (A&H): 15 credits

- 5
- 5

#### Social Sciences (SSc): 15 credits

- Fulfilled with BPHYS 484 5 x
- 5
- 5

#### Diversity (DIV): 3 credits (5 credits if admitted to UW Bothell AUT23 or later)

- 3 or 5

---

### Projected Course Offerings 2023-2024

(subject to change)

<table>
<thead>
<tr>
<th></th>
<th>Autumn</th>
<th>Winter</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>STMATH 124</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>STMATH 125</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>BPHYS 121</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>BPHYS 122</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>BPHYS 123</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>STMATH 126</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>STMATH 207</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>BCHEM 143</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>BCHEM 144</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>BPHYS 221</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>BPHYS 222</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>BPHYS 224</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>BPHYS 433</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>BPHYS 484</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>BPHYS 494</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>BPHYS 498</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>BPHYS 499</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

### Notes

- Varies
- *Fulfilled with BPHYS 484*
Important Tips & Additional Information

- If you need assistance, please email Academic Advisor Evinn Hickey at ehickey1@uw.edu

- **Upper Division Prerequisites** - Many upper division physics electives require advanced math beyond STMATH 207. Take all lower-division physics courses as soon as possible and review prerequisites for upper division courses to prepare. Upper division elective courses may require additional prerequisites.

- **Requirement Overlap** - A single course cannot fulfill more than one degree-specific requirement, but it can fulfill a degree-specific requirement and any number of General Education requirements. For example, BPHYS 484 will also fulfill both "Additional Writing" and "Social Sciences" credit.

- **Using Other Coursework** - Certain courses from engineering or other disciplines can potentially be used to fulfill Physics degree requirements. Exceptions are granted upon review of your petition by the Physics program faculty. In addition, some courses have equivalents at Seattle campus. Please ask your academic advisor for more information.

- **Subject to Change** - All requirements and policies are subject to change without notice. The course list is updated regularly. Please check with your advisor to verify that a course fulfills any given requirement.

Credit Policies

- **Total Credits** - You must have at least 180 college-level credits to earn this degree.

- **Transfer Credits** - The University of Washington Bothell allows 135 credits to transfer. Of those, up to 90 credits may be lower division courses (100-200 level). You may request to have more lower division credits count towards the 180-credit minimum.

- **Cross-Campus Enrollment** - After earning a certain number of credits at UWF Bothell (usually 15), students may take up to 15 credits per academic year at other UW campuses.

- **Residency** - To earn a degree from The University of Washington, students must complete at least 45 of their final 60 credits at their home campus (UW Bothell).

- **Minimum GPA** - All classes in the Calculus series (STMATH 124, 125, 126) and Physics series (B PHYS 121, 122, 123) must be completed with a 2.0 or higher. In addition, you must maintain a minimum GPA of 2.0 to earn a degree from UWB.

Notes