

### AB in Physics

<p style="text-align: center;">(1)</p> <p><b>Where are the learning outcomes for this level/program published? (please specify)</b>  <b>Include URLs where appropriate.</b></p>	<p style="text-align: center;">(2)</p> <p><b>Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree? (e.g., capstone course, portfolio review, licensure examination)</b></p>	<p style="text-align: center;">(3)</p> <p><b>Who interprets the evidence? What is the process? (e.g. annually by the curriculum committee)</b></p>	<p style="text-align: center;">(4)</p> <p><b>What changes have been made as a result of using the data/evidence?</b></p>	<p style="text-align: center;">(5)</p> <p><b>Date of most recent program review (for general education and each degree program)</b></p>
<p>Students will be able to:</p> <ul style="list-style-type: none"> <li>• Use critical thinking skills to apply scientific reasoning to new situations</li> <li>• Communicate effectively orally or in writing</li> <li>• Solve problems using logical, mathematical and computational skills</li> <li>• Demonstrate an understanding of the key concepts in the core areas of physics, including:               <ul style="list-style-type: none"> <li>- classical mechanics</li> <li>- electricity and magnetism</li> <li>- quantum mechanics</li> <li>- statistical mechanics</li> </ul> </li> </ul>	<p>Critical thinking skills will be assessed in the self-designed lab experiment in P76, P47, P48, or A6 (every major takes at least one of these courses)</p> <p>Communication skills will be assessed in the culminating experience.</p> <p>Key concepts and problem solving will be assessed in the final exams of P40, P41, P43, or P44</p>	<p>Department faculty meet at the end of each academic year to certify degrees. The process begins with the department's Undergraduate Adviser reviewing the records of all graduating seniors. The full department faculty as a group then reviews each student's overall GPA, grades in each course, and performance in the culminating experience. Discussion at this full faculty review in the future will include consideration of evidence of achievement of learning outcomes.</p>	<p>In support of the breadth of skills we are requiring of our majors, we have made requirements more flexible to allow students to take advantage of adjacent majors such as biology and chemistry, thereby preparing them for a wider range of post-college occupations. Similarly, the culminating experience has been adjusted nearly every year to more reliably ensure students have the opportunity to reinforce core skills of the discipline and strengthen written or oral communication skills.</p>	<p>Fall 2018</p>