<table>
<thead>
<tr>
<th>Outcome</th>
<th>Assessment Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Students will demonstrate basic conceptual understanding of topics, for example, special relativity, wave-particle duality, properties of quantum mechanical wavefunctions, and limitations of classical physics. Final exam questions Mid-term exam questions</td>
</tr>
<tr>
<td>2</td>
<td>Students will apply their numerical and computational skills to solve complex problems involving, for example, Lagrangian mechanics, non-inertial reference frames, time evolution of a quantum state (computational), operators and commutators, spin, Maxwell’s equations, and Laplace’s equation (computational). Final exam Homework assignments/projects</td>
</tr>
<tr>
<td>3</td>
<td>Students will perform an advanced experimental project and data analysis, including, for example, distinguishing statistical and systematic errors, propagating errors, and representing data graphically. Final exam questions Mid-term exam questions</td>
</tr>
<tr>
<td>4</td>
<td>Students will successfully pursue graduate education after completing BS in physics Final exam questions Mid-term exam questions</td>
</tr>
<tr>
<td>5</td>
<td>Students will demonstrate a basic understanding of the research process. Research proposal Homework assignment</td>
</tr>
<tr>
<td>6</td>
<td>Students will apply modern techniques and methodologies to collect/produce data as well as to analyze and interpret it Research reports Survey</td>
</tr>
<tr>
<td>7</td>
<td>Students will demonstrate the ability to communicate their research findings to the department Research reports Survey</td>
</tr>
</tbody>
</table>

*Preliminary Outcomes*