### REQUIRED JUNIOR LEVEL COURSES<sup>1,2</sup>

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 108: University Physics I and PHYS 109: University Physics II</td>
<td>6</td>
</tr>
<tr>
<td>PHYS 124: Physics for Life Sciences I and PHYS 126: Physics for Life Sciences II</td>
<td>6</td>
</tr>
<tr>
<td>PHYS 144: Mechanics and Waves and PHYS 146: Electromagnetism and Radiation</td>
<td>6</td>
</tr>
</tbody>
</table>

### GENERAL SENIOR LEVEL COURSES<sup>3</sup>

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSICS COURSES</td>
<td>18</td>
</tr>
</tbody>
</table>

- PHYS 200: Relative Aspects of Physics [FALL]
- PHYS 206: Quantum Aspects of Physics [FALL]
- PHYS 212: Revolutions in Physics [WINTER]
- PHYS 224: Mechanics [WINTER]
- PHYS 250: Introduction to Biophysics [FALL]
- PHYS 261: Physics of Energy [WINTER]
- PHYS 301: Nuclear Physics [WINTER]
- PHYS 308: Condensed Matter Physics [FALL]
- PHYS 320: Origins of Elements [FALL]
- PHYS 372: Introduction to Quantum Theory [NOT OFFERED IN 2014/15]
- PHYS 390: Advanced Physics Laboratory [FALL]
- PHYS 495: Special Topics in Physics and Astrophysics<sup>5</sup> [NOT OFFERED 2014/15]
- PHYS 498: Independent Research<sup>5</sup> [FALL/WINTER]

### IMPORTANT PLANNING NOTES

1. The six credits students choose to fulfill their junior level prerequisite requirements can also fulfill core requirements in the Bachelor of Science or Bachelor of Arts degree.
2. Students are required to consult with the MacEwan University Academic Calendar to ensure they meet the prerequisites for all Physics courses they enrol in.
3. Arts students who choose a Physics minor must comply with Bachelor of Science minor residency requirements. Science minors must complete a minimum of nine senior level MacEwan University credits, including a minimum of three credits at the 300- or 400-level.
4. **PHSC 200** is a Physical Sciences course that covers material relevant to Chemistry, Earth and Planetary Sciences, and Physics. It can be used toward a student's Chemistry, Earth and Planetary Sciences, and Physics requirements, in their major or their minor, but while it may be applied to any of these requirements, students can only receive credit for the course one time.
   - **PHSC 200** is not a discipline-specific course, while the Physics minor is discipline-specific. If a student pairs a Physics minor with a non-Physical Science major, and takes **PHSC 200** outside of their minor, it will not count toward the student's maximum of six major/minor credits in their options.
5. Students may take both **PHYS 495** and **PHYS 498** for credit a maximum of two times, as long as the course topic is different each time they take either course.

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This planning sheet should be used only as a guide for course planning and it should be used in conjunction with the Bachelor of Science or Bachelor of Arts degree planner. Remember: not all courses listed are offered each year and course offerings are subject to change. In the event of a discrepancy between the information presented on this sheet and that available on myStudentSystem, the information on myStudentSystem will be considered accurate.