Your Guide to the Physics Major: Education Track

(Last updated Spring 2019)
This represents the requirements being put in place as of Fall 2019.

Requirements for the Physics Major Education Track

<table>
<thead>
<tr>
<th>Calculus I MTH111</th>
<th>Introductory Physics I PHY117 (F/S)</th>
<th>Pedagogy/Practicum PHY300 (F or S) – at least twice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculus II MTH112</td>
<td>Introductory Physics II PHY118 (F/S)</td>
<td>PHY301 (F or S) – at least once</td>
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<tr>
<td>Calculus III MTH212</td>
<td>Light, Relativity, and Quantum PHY215 (S)</td>
<td>Physical Electronics PHY240 (F)</td>
</tr>
<tr>
<td>Math Methods PHY210 (F/S)</td>
<td>Co-req Calculus I MTH111</td>
<td>The rest!</td>
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<td></td>
<td></td>
<td>Introduction to Astronomy AST111 (F)</td>
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<td></td>
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<td>The American Middle School and High School EDC232 (F)</td>
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<td>Introduction to the Learning Sciences EDC238 (F)</td>
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<td></td>
<td>Classical Mechanics PHY317 (F)</td>
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<td></td>
<td>Electricity &amp; Magnetism PHY318 (F)</td>
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<td>Thermal Physics PHY319 (S)</td>
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<tr>
<td></td>
<td></td>
<td>Quantum Mechanics PHY327 (S)</td>
</tr>
</tbody>
</table>

Pick one of these!

Requirements:

- Calculus I MTH111
- Calculus II MTH112
- Calculus III MTH212
- Math Methods PHY210 (F/S)
- Introductory Physics I PHY117 (F/S)
- Introductory Physics II PHY118 (F/S)
- Light, Relativity, and Quantum PHY215 (S)
- Physical Electronics PHY240 (F)
- The rest!
- Introduction to Astronomy AST111 (F)
- Classical Mechanics PHY317 (F)
- Electricity & Magnetism PHY318 (F)
- Thermal Physics PHY319 (S)
- Quantum Mechanics PHY327 (S)
- The American Middle School and High School EDC232 (F)
- Introduction to the Learning Sciences EDC238 (F)

Notes:

- Calculus I MTH111
- Calculus II MTH112
- Calculus III MTH212
- Math Methods PHY210 (F/S)
- Introductory Physics I PHY117 (F/S)
- Introductory Physics II PHY118 (F/S)
- Light, Relativity, and Quantum PHY215 (S)
- Physical Electronics PHY240 (F)
- The rest!
- Introduction to Astronomy AST111 (F)
- Classical Mechanics PHY317 (F)
- Electricity & Magnetism PHY318 (F)
- Thermal Physics PHY319 (S)
- Quantum Mechanics PHY327 (S)
- The American Middle School and High School EDC232 (F)
- Introduction to the Learning Sciences EDC238 (F)

Choose at least one of the following four:

- PHY317 – F – Classical Mechanics
- PHY318 – F – Electricity & Magnetism
- PHY319 – S – Thermal Physics
- PHY327 – S – Quantum Mechanics

Research in Physics
- Special Studies
- Summer Research
- Honors
Education Track (Continued)

**Licensure:** In addition to the listed requirements, students seeking licensure would also need to take EDC342, EDC346, EDC347, EDC352, and EDC390. Anyone interested in seeking licensure should consult with a faculty member of the Department of Education and Child Study.

**Math courses:** Students must complete or place out of three semesters of calculus to fulfill the prerequisites for the required physics courses.

**Substitutions:** Several courses above may be replaced with appropriate substitutes. Speak to a member of the department for details. The list would be the same for the education track as for the current major.