Physics (BS) - Premedical Option

Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University’s residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student’s major or concentration area.

Major in Physics (Premedical Option) is designed for a student intending a career in a health professional field such as Medicine. Besides Physics, the Curriculum includes extra courses in Chemistry and recommended courses in Biology, Psychology and the Social Sciences to prepare the student for the MCAT exam. Because of these additional requirements there are relative few elective hours in this program and the overall hours total is 129 hours instead of the nominal 120 hours.

<table>
<thead>
<tr>
<th>Premedical Option course requirements include:</th>
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<tbody>
<tr>
<td>PH 107</td>
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<td>PH 201</td>
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<td>PH 202</td>
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<tr>
<td>PH 303</td>
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<tr>
<td>PH 348</td>
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<tr>
<td>PH 366</td>
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<tr>
<td>PH 385(W)</td>
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<tr>
<td>PH 448</td>
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<td>PH 463</td>
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</tbody>
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Three (3) hours of Physics electives must be taken from among the following:

| PH 311                                        |
| PH 346                                        |
| PH 349                                        |
| PH 354                                        |
| PH 367                                        |
| PH 390                                        |
| PH 411                                        |
| PH 449                                        |
| PH 494                                        |
| PH 499                                        |

The following additional technical courses are required:

| CH 131                                        |
| CH 132                                        |
CH 201
CH 202
BLY 121
BLY 122
BLY302 or BMD 350
BMD 321
BMD 322

Requirements from the Social and Behavioral Sciences include:

PSY 120
SY 109 or SY 112

In addition, the following math courses are prerequisites for upper division Physics courses:

MA 125
MA 126
MA 227
MA 238

The Premedical Option includes the statistics course:

ST 210

With the exception of PH 303 and PH 448, which are offered every year, all upper division Physics courses are offered every other year.

All Physics majors will be required to take an assessment test, at no cost to the student, and an exit interview before graduation as directed by the department.

**General Education Requirements For Physics Majors (All Options)**

Areas I, II, and IV of the General Education Requirements for Physics are specified in the College of Arts and Sciences section. Note that Area III requirements (Mathematics and Natural Sciences) are fulfilled by the major requirements specified above.

**General Comments**

- A sample program may be found at [http://www.southalabama.edu/departments/academicsuccess/Iyac/advisingguides/resources/A%20PH_Premed_4%20Year%20Plan.pdf](http://www.southalabama.edu/departments/academicsuccess/Iyac/advisingguides/resources/A%20PH_Premed_4%20Year%20Plan.pdf)
- PH 114 and PH 115 with either PH 201 or PH 202 may be substituted for PH 201 and PH 202 with the prior approval of the physics department chair.
- The sequences PH 114, PH 115 and PH 201, PH 202 may not both be taken for credit.

<table>
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<th>Required Courses for Premedical Option (129 Hours)</th>
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<tr>
<td><strong>Totals:</strong></td>
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<tr>
<td><strong>Physics Electives</strong></td>
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<tr>
<td><strong>Hours</strong></td>
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<tr>
<td><strong>Physics</strong></td>
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<tr>
<td><strong>Mathematics</strong></td>
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<tr>
<td><strong>Chemistry</strong></td>
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<tr>
<td><strong>Biology</strong></td>
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<tr>
<td><strong>Art/Humanities</strong></td>
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Department Information

Department of Physics web site
http://www.southalabama.edu/physics/

The curriculum in the Department of Physics serves three groups of students: those preparing for careers in physics, those pursuing professional fields such as medicine and engineering, and those electing physics and astronomy as part of the natural science requirement for Bachelor of Arts or Bachelor of Science Degrees. The degree program in physics allows for flexibility to the extent that the serious student can select related courses in biology, chemistry, geology, computer science, and engineering to prepare for a career in such interdisciplinary areas as biophysics, geophysics, oceanography, and environmental science. Three options for a Bachelor of Science degree in Physics are offered. One option (the Premedical Option) is for those students pursuing medicine as a career. Links to sample programs and requirements for each option are given in the degree General Comments sections of each Area of Study. Students pursuing a degree in Physics also must have a minor in another discipline. In addition, the Department of Physics offers a double major with the Meteorology program within the Department of Earth Sciences.

All first-time freshmen must successfully complete CAS 100: First Year Experience, as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry.

The Physics Pre-Medical Option requires a minimum of 129 hours, while the other Physics options require a minimum of 120 hours.