PHYSICS MAJOR, B.S. – 2022-2023

Note: For those students who have not completed AP calculus BC with a score of 5, Physics 8 is strongly recommended before attempting any other physics course.

PREPARATION FOR THE MAJOR

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Units to Complete</th>
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</thead>
<tbody>
<tr>
<td>Physics 21-22-23-24-25</td>
<td>20</td>
</tr>
<tr>
<td>Physics 20AL-BL-CL or 13AL-BL-CL</td>
<td>6</td>
</tr>
<tr>
<td>Physics 29</td>
<td>2</td>
</tr>
<tr>
<td>Mathematics 2A or 3A, 2B or 3B, 4A-B, 6A-B</td>
<td>24-26</td>
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</tbody>
</table>

Two science electives, chosen from the following or in consultation with a faculty advisor:
- Astronomy 1, 2, Chemistry 1A or 2A, 1B or 2B, Earth 2, 9, 11, 20, EEMB 22 or W22 or MCDB 20, PSTAT 10

UPPER-DIVISION MAJOR

52 UD Physics units are required, distributed as follows:

A. Physics 100A | 4 |
B. Physics 103, 104 | 8 |
C. Physics 110A-B | 8 |
D. Physics 115A | 4 |
E. Physics 119A | 4 |
F. **CONCENTRATION:** (in consultation with undergraduate and faculty advisors) | 24 |
   - **ASTROPHYSICS** - Physics 115B, 134L; one course from 127AL, 128AL, 129L, 199*;
   - three courses from the following: Physics 132, 133, 136, 137
   - **CORE** - Physics 115B, 119B, 128AL; one course from the following: Physics 127AL, 129L, 134L;
   - one physics elective or PSTAT 120A; one additional physics elective
   - **EDUCATION** - Physics 128AL, 180; one course from the following: 134L, 127AL, 129L, 199*;
   - three courses from the following: ED 128, 129, 130, 131, 133, 150
   - **SOFT AND LIVING MATTER** - Physics 119B, 127AL, 128AL, 138, 139, 141

*Note: In order for 199 to count for the requirements of the Astrophysics and Education concentrations, it must consist of 4 units in one quarter, and involve the collection/processing of data and/or construction of instrumentation.

Courses taken: __________________________________________________________

A grade of C- or above is required in order to continue the sequence of upper division courses.

MAJOR REGULATIONS

**PREREQUISITES**
Check the General Catalog for the prerequisites to all listed courses.

**P/NP GRADING OPTION**
Not allowed for any major course (Prep or UD major), including courses applied to the major from other departments.

**SUBSTITUTIONS**
In the major requirements permissible only by petition to the department chair and dean.

**G.P.A REQUIREMENTS**
At least 2.0 overall UC average in all upper-division major courses and all courses (Prep and UD) for the major.

**DOUBLE MAJORS**
With the approval of each department chairperson, up to a total of 8 units may be applied simultaneously to both UD majors.