## Physics, B.A.

Department of Physics, 303-556-2454, North Classroom 3123

College of Letters, Arts and Sciences

Catalog 15-16

This sheet applies to the 2015-16 catalog only. It does not replace the full catalog or departmental advising sheets as official statements of requirements. Students with declared majors must work with a faculty advisor on course selection and sequencing to ensure a timely graduation.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
<th>Description</th>
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<tbody>
<tr>
<td>General Studies</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>Major courses</td>
<td>31</td>
<td></td>
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<tr>
<td>Required ancillary courses</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Minor courses</td>
<td>18 min</td>
<td></td>
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<tr>
<td>Electives</td>
<td>29 hours</td>
<td></td>
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<tr>
<td>Total to graduate</td>
<td>120 min</td>
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### TO BE COMPLETED WITHIN FIRST 30 COLLEGE-LEVEL CREDIT HOURS

**Written Communication**

- **Written Communication**
  - ENG 1010 (3 hrs.) Composing Arguments*
  - or ENG 1008/1009 (6 hrs.) Intro to Composition, Parts 1 & 2*
  - ENG 1020 (3 hrs.) Freshman Comp: Analysis, Research, & Documt.
  
  (ENG 1020 must be completed within 45 credit hours)

**Oral Communication**

- (3 hrs.)

**Quantitative Literacy**

- MTH 1110 (4 hrs.) College Algebra or higher level math

*NOTE: MTH 1110 & MTH 1120 OR MTH 1400 are prereqs for MTH 1410 do not take MTH 1112 College Algebra through Modeling

**Arts and Humanities**

- (3 hrs.)
- (3 hrs.)

**Historical**

- (3 hrs.)

**Natural and Physical Sciences** May not be PHY courses.

- (3 hrs.)
- (3 hrs.)

**Social and Behavioral Sciences I**

- (3 hrs.)

**Social and Behavioral Sciences II**

- (3 hrs.)

**Global Diversity** may be satisfied within General Studies. May not be a PHY course.

- (3 hrs.)

### MAJOR COURSES

Please see a Faculty Advisor in the PHY Dept.

* A grade of "C-" or better is required for each course in this program

- * PHY 2311 (4hrs.) General Physics I
- * PHY 2321 (1hr.) General Physics I Lab
- * PHY 2331 (4hrs.) General Physics II
- * PHY 2341 (1hr.) General Physics II Lab
- PHY 2711 (3hrs.) Vibrations and Waves
- PHY 2811 (4hrs.) Modern Physics I
- PHY 3011 (3hrs.) Modern Physics II
- PHY 3711 (2hrs.) Physics Lab I
- PHY 4921 (1hr.) Physics Senior Seminar (Senior Experience)

*A one-year sequence of PHY 2010 - PHY 2020 - PHY 2030 - PHY 2040 may be substituted for the PHY 2311 - PHY 2331 - PHY 2321 - PHY 2341 requirements with the consent of the Physics Department.

### PHYSICS ELECTIVES

Work with your Physics faculty advisor to choose a minimum of 8 additional credit hours of upper-division physics, 2 credit hours of which must be from either PHY 4611 or PHY 4711.

**NOTE:** Most of the above courses have math prerequisites. Check prerequisites in the current MSU Denver catalog before registering for the above courses.

**Required Ancillary Courses:** See catalog.msudenver.edu for course prerequisites

- MTH 1410 (4hrs) Calculus I
- MTH 2410 (4hrs) Calculus II

**Multicultural Requirement**

May be satisfied in Gen Studies, major, minor, or electives

### MINOR (required)

### ELECTIVES