**General Requirements for Students Matriculating in Academic Year 2010-2011**

**BACHELOR of SCIENCE**

**MAJOR:** Physics  
**OPTION:** Applied Physics

**Minimum Overall Grade Point Average:** 2.00  
**Total Hours:** 120  
(cumulative graduation/retention GPA)

*Other GPA requirements, see below.*

### General Education Requirements: 42 Hours

<table>
<thead>
<tr>
<th>Area</th>
<th>Hours</th>
<th>To be selected from:</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition &amp; Oral Comm.</td>
<td>6</td>
<td>ENGL 1113 or 1313; &amp; 1213 or 1413 or 3323 (See Academic Regulation 3.5 in Catalog)</td>
</tr>
<tr>
<td>American History &amp; Gov.</td>
<td>6</td>
<td>HIST 1103; POLS 1113</td>
</tr>
<tr>
<td>Analytical &amp; Quantitative Thought (A)</td>
<td>7</td>
<td>MATH 2144 and 2153</td>
</tr>
<tr>
<td>Humanities (H)</td>
<td>6</td>
<td>Courses designated (H)</td>
</tr>
<tr>
<td>Natural Sciences (N)</td>
<td>8</td>
<td>BIOL 1114; CHEM 1314</td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences (S)</td>
<td>6</td>
<td>Courses designated (S)</td>
</tr>
<tr>
<td>Diversity (D)</td>
<td>--</td>
<td>Course designated (D) (see note 1.b.)</td>
</tr>
<tr>
<td>International Dimension (I)</td>
<td>--</td>
<td>Course designated (I) (see note 1.b.)</td>
</tr>
<tr>
<td>Scientific Investigation (L)</td>
<td>--</td>
<td>Course designated (L) (see note 1.b.)</td>
</tr>
<tr>
<td>Controlled Electives</td>
<td>3</td>
<td>Any course with a GE designation in any of the above areas</td>
</tr>
</tbody>
</table>

### College/Departmental Requirements: 13 Hours

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation</td>
<td>1</td>
<td>A&amp;S 1111 (transfer students with 15 hours exempt)</td>
</tr>
<tr>
<td>Arts and Humanities</td>
<td>3</td>
<td>(see note 2.a.)</td>
</tr>
<tr>
<td>Natural &amp; Mathematical Sciences</td>
<td>9</td>
<td>CHEM 1515; PHYS 2014 or 2314</td>
</tr>
</tbody>
</table>

### Electives: 16 Hours

9 hours may need to be upper-division; 6 of these may need to be general education.

Suggested courses:  
- ASTR 1014, 1024, 4010 (1);  
- CS 4113, 4513;  
- ECEN 3213;  
- MATH 4013, 4143, 4153, 4233, 4283, 1001

### Major Requirements: 49 Hours

A minimum grade of "C" in each course

**Core Requirements:** 32 hours

- PHYS 2114 or 2414  
- 3013  
- 3113  
- 3213  
- 3322  
- 3513  
- 3622  
- 3713  
- 4113  
- MATH 2163  
- 2233

**Additional Requirements:** 17 hours

(Students in the Engineering Physics Program should select engineering courses in consultation with Physics Department adviser)

- 9 upper-division hours in any one academic department.  
- 8 upper-division hours in related fields.

### Other Requirements:

- See notes 1, 2 & 3 on back of degree sheet
- Foreign Language Proficiency: See note 3 on back of sheet.
- Upper-Division Gen Ed: 6 hours outside major prefix.
- Upper-Division Credit: Total hours must include at least 48 hours in courses numbered 3000 or above.
- Hours in One Prefix: Hours in one prefix in excess of 48 will be added to the minimum total of 120 required for graduation.

Students will be held responsible for degree requirements in effect at the time of matriculation and any changes that are made, so long as these changes do not result in semester credit hours being added or do not delay graduation.

Signature on file in the Office of the Registrar  
**DEAN**

Signature on file in the Office of the Registrar  
**DEPARTMENT HEAD**
College of Arts and Sciences

1. GENERAL EDUCATION REQUIREMENTS
   a. No more than two courses (or eight hours) from the same course prefix may be used to meet General Education Analytical and Quantitative Thought (A) and Natural Sciences (N) combined with College and Departmental Natural and Mathematical Sciences.
      No more than two courses (or six hours) from the same course prefix may be used to meet General Education Humanities (H) combined with College and Departmental Arts and Humanities.
      The General Education Controlled Elective and one required MATH course do not count against the two-course maximum.
   b. The Diversity, International Dimension, Scientific Investigation and Non-Western requirements may be satisfied by courses also used to satisfy any part of a student’s degree program (i.e., in General Education, College Departmental Requirements, Major Requirements or Electives).
   c. Courses in the major prefix may not be used to satisfy the College requirement for six hours upper-division General Education.

2. A&S COLLEGE/DEPARTMENTAL REQUIREMENTS
   a. Arts and Humanities are defined as any course carrying an (H) designation or courses from ART, MUSI, PHIL (except 1313 and 3003), REL, TH, creative writing, foreign languages (second year and above), linguistics and literature.
   b. Natural and Mathematical Sciences are defined as any course from the following prefixes: ASTR, BIOC, BIOL, BOT, CHEM, CS (except 4883), GEOL, MATH, MICR, PHYS, STAT and ZOOL; or courses from other departments that carry an (A) or (N) general education designation.
   c. Non-Western Studies Requirement for B.A. and B.F.A. (see 1.b. above). One 3-hour course in Non-Western Studies from: A&S 2000 (Intro to African Studies); ANTH 3443, 4223; ART 3693, 4603, 4653, 4663, 4673, 4683; ECON 4643; ENGL 3173, 3183; ENGL 3190 (African Novel); FLL 3500 (Advanced Japanese); GEOG 3053, 3753, 3763, 3783; HIST 1713, 3013, 3053, 3203, 3403, 3413, 3423, 3433, 3503, 3513, 3523, 3543, 3553; HONR 3033; JAPN 1225, 2113, 2223; MUSI 3583; PHIL 3943; POLS 3053, 3223, 3313; REL 3573, 3613, 4050 (Understanding Islam), 4113; RUSS 3053; SOC 4533, 4950 (Gender in the Middle East).

3. FOREIGN LANGUAGE PROFICIENCY
   a. The foreign language requirement for the B.A. may be satisfied by 10 hours college credit in the same language, or equivalent proficiency (e.g., passing an advanced standing examination; completing a second-year or higher college-level course in the language, etc.).
   b. The foreign language requirement for the B.S., B.M. and B.F.A. may be satisfied by presenting a high school transcript which demonstrates two years of study of a single foreign language (passing grades at second year level of study). It may also be satisfied by any of the options listed above for the B.A.

4. EXCLUSIONS
   a. Courses used to satisfy the English Composition, American History and Government requirement will not count toward the 48 hour maximum allowed under one prefix.
   b. Courses with ATHL prefix and leisure activity courses may not be used for degree credit in the College of Arts & Sciences.

5. TEACHER CERTIFICATION
   Students can satisfy the requirements for secondary schools teaching certification while earning a B.A. or B.S. in the College of Arts & Sciences. Those interested should see their Arts and Sciences adviser and the OSU Professional Education Unit in room 325 Willard.