DATE: January 25, 2013

FROM: David A. Weintraub, DUS, Department of Physics and Astronomy
      Robert Scherrer, Chair, Department of Physics and Astronomy

TO: Calvin Miller, Senior Chair, CEP 2012/2013

SUBJECT: revision of Minor in Physics

On behalf of the faculty of the Department of Physics and Astronomy, which voted unanimously (18 in favor, 0 against, 0 abstentions) in support of this proposal, we request that the Minor in Physics be revised from:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any first-semester calculus-based physics class with lab (116a+118a, 121a)</td>
<td>4-5</td>
</tr>
<tr>
<td>Any second-semester calculus-based physics class with lab (116b+118b, 121b)</td>
<td>4-5</td>
</tr>
<tr>
<td>Physics 225 or 225W</td>
<td>4</td>
</tr>
<tr>
<td>Two 200-level and/or 300-level physics courses, one of which may be a</td>
<td>4</td>
</tr>
<tr>
<td>3 credit hour one semester directed study course (289)</td>
<td>6</td>
</tr>
<tr>
<td>Physics 250</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td>19-21</td>
</tr>
</tbody>
</table>

...to the following (changes noted in bold type):

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<tr>
<td>Any first-semester calculus-based physics class with lab (113a+114a, 116a+118a, 121a)</td>
<td>4-5</td>
</tr>
<tr>
<td>Any second-semester calculus-based physics class with lab (113b+114b, 116b+118b, 121b)</td>
<td>4-5</td>
</tr>
<tr>
<td>Physics 225 or 225W <strong>or 226 or 226W</strong></td>
<td>4</td>
</tr>
<tr>
<td>Two 200-level and/or 300-level physics courses, one of which may be either a 3 credit</td>
<td>6</td>
</tr>
<tr>
<td>Hour one semester directed study course (289) **or a 3 credit hour one semester</td>
<td></td>
</tr>
<tr>
<td>independent study course (291)</td>
<td></td>
</tr>
<tr>
<td>Physics 250</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
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The reasons for these revisions are as follows:

1. We have just proposed a new calculus-based intro physics sequence (113 + 114) for the life sciences. We wish to include this sequence as an entry point for the minor.
2. Phys 225/225W is no longer a pre-requisite for 226/226W. Any one of these courses is satisfactory for this intermediate-level requirement.
3. We do not wish to limit students to ‘directed’ study for their research options for the minor.
Catalog-ready copy:

Departmental Minors

The physics or astronomy minor is suitable for students who wish to supplement a related discipline or simply have a general interest in the field. Note that the Independent and Directed Study portion of the physics minor is not a requirement but may count toward the minor under certain circumstances. Seek departmental approval before enrolling in either of these classes.

Minor in Physics

The minor requires a minimum of 19 credit hours of course work, distributed as follows:

Any first-semester calculus-based physics class with lab  
(113a and 114a, 116a and 118a, or 121a)  
4-5

Any second-semester calculus-based physics class with lab  
(113b and 114b, 116b and 118b, or 121b)  
4-5

Physics 225, 225W, 226, or 226W  
4

Two 200-level and/or 300-level physics courses, one of which may be a  
3 credit hour one semester directed study course (289) or a  
3 credit hour one semester independent study course (291)  
6

Physics 250  
1

Total Credit Hours  
19-21
Catalog-ready copy:

Departmental Minors

The physics or astronomy minor is suitable for students who wish to supplement a related discipline or simply have a general interest in the field. Note that the Independent and Directed Study portion of the physics minor is not a requirement but may count toward the minor under certain circumstances. Seek departmental approval before enrolling in either of these classes.

Minor in Physics

The minor requires a minimum of 19 credit hours of course work, distributed as follows:

Any first-semester calculus-based physics class with lab
(113a and 114a, 116a and 118a, or 121a)  4-5

Any second-semester calculus-based physics class with lab
(113b and 114b, 116b and 118b, or 121b)  4-5

Physics 225, 225W, 226, or 226W  4

Two 200-level and/or 300-level physics courses, one of which may be a
3 credit hour one semester directed study course (289) or a
3 credit hour one semester independent study course (291)  6

Physics 250  1

Total Credit Hours  19-21