Applicants seeking certification as secondary biology teachers must have both breadth and depth of background in the content area as demonstrated by a major in biology (or approximately 36 credits in biology course work or equivalent documented experience) and related math and science course work/knowledge (see below).

The applicant’s background should include the following topics:

- General/introductory biology
- Anatomy/Human Biology
- Biochemistry
- Botany
- Cell biology
- Ecology
- Evolution
- Genetics
- Marine/estuarine biology
- Microbiology
- Molecular biology
- Physiology
- Zoology

*Supporting course work/knowledge in all four (4) of the following areas:

- Chemistry
- Earth/space/environmental science
- Physics
- Mathematics (pre-calculus or higher level)

Varied laboratory experience

*All four areas required for subsequent general science endorsement

### SUMMARY of content requirements to fulfill:

<table>
<thead>
<tr>
<th>Content Need</th>
<th>Project Type</th>
<th># Units</th>
<th>Comment</th>
<th>Completed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEEDS</td>
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</tbody>
</table>

Note: The above recommendations may be taken concurrently with the graduate program as determined by the adviser.

<table>
<thead>
<tr>
<th>Overall rating of candidate’s content knowledge background</th>
<th>Rating, based on background and intake interview, of candidate’s ability to create original investigations for instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Emergent ☐ Proficient ☐ Highly Proficient</td>
<td>☐ Emergent ☐ Proficient ☐ Highly Proficient</td>
</tr>
</tbody>
</table>
Applicant Name:

Intake Interview Notes: