ALIGNMENT PRINCIPLES OF TEST CREATION

1. Clearly define the general intended learning outcomes of the course.
   a. Describe what the student should be able to do, not what the teacher is expected to do.
   b. Describe the intended product or result, not the intended process.
   c. Focus on the task the learner is expected to perform, rather than on specific topics or subject-matter content.
   d. Define only one intended outcome in each objective.
   e. Select the proper level of generality. Do not be too specific, but also avoid being too general.

List these intended learning outcomes on the syllabus.

2. Focus classroom activities, teaching and readings on meeting the intended learning outcomes of the course.

   (It will be necessary to prescribe how the general learning outcomes will be achieved by using specific learning objectives, which detail the content and process that will be taught and measured for each lesson or unit. It is important that, at some point during the instruction, students are told what the specific learning objectives are for that lesson. Also, it may be necessary to explain how the specific learning objectives are related to the general intended learning outcomes of the entire course. Moreover, most test questions will be created based on these lesson-by-lesson specific objectives, so it is imperative that they are closely linked with the general intended learning outcomes of the course.)

3. Assess only what was taught, read and practiced.
FORMATIVE EXERCISE: ALIGNMENT PRINCIPLES

Instructions: The following questions are designed to assess your understanding of the alignment principles of test creation. Demonstrate your ability to identify which, if any, of the principles have been violated by writing the number and letter of the principle violated in the box on the left.

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### Alignment Questions

1. Sample Intended Learning Outcomes (At the course level—to be listed on the syllabus):
   a. "Uses a step-by-step process to solve story problems."
   b. "Understands photosynthesis"
   c. "Communicate effectively"
   d. "Punctuates sentences properly"
   e. "Knows and understands basic principles of the gospel."
   f. "To increase students’ ability to read weather maps."

2. Sample learning activities connected to the outcomes listed in question 1:
   a. Students solve story problems.
   b. Students watch plants grow.
   c. Students debate current issues.
   d. Students write letters to the editor.
   e. Students understand what it means to repent.
   f. Students are taught how to read weather and climate maps.

3. Test questions associated only with the above mentioned learning outcomes and activities:
   a. Rita has one dollar. She wants to buy as many pieces of 3 cent candy as she can with her dollar. How many pieces can she buy? (Sales tax is 7%.)
   b. \( 6H_2O + 6CO_2 \rightarrow \) __________.
   c. Explain in no more than three sentences why America should be the World’s policeman.
   d. Punctuate the following sentence:
      But why she asked
   e. Explain why repentance is important.
   f. What is the difference between cirrus and nimbus clouds?
### Alignment Principles of Test Creation (Review)

1. Clearly define the general intended learning outcomes of the course.
   a. Describe what the student should be able to do, not what the teacher is expected to do.
   b. Describe the intended product or result, not the intended process.
   c. Focus on the task the learner is expected to perform, rather than on specific topics or subject-matter content.
   d. Define only one intended outcome in each objective.
   e. Select the proper level of generality. Do not be too specific, but also avoid being too general.

2. Focus classroom activities, teaching and readings on meeting only the intended learning outcomes of the course.

3. Assess only what was taught, read and practiced.

### ANSWER KEY: ALIGNMENT

<table>
<thead>
<tr>
<th>Alignment Answers</th>
<th>Possible Corrections</th>
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<tbody>
<tr>
<td>1. a. 1b</td>
<td>Provides an appropriate answer to story problems</td>
</tr>
<tr>
<td>b. 1c</td>
<td>Understands basic biological principles</td>
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<tr>
<td>c. 1e</td>
<td>Writes clear, effective English</td>
</tr>
<tr>
<td>d. 1e</td>
<td>Writes clear, effective English</td>
</tr>
<tr>
<td>e. 1d</td>
<td>Understands basic gospel principles</td>
</tr>
<tr>
<td>f. 1a</td>
<td>Interprets weather maps correctly</td>
</tr>
<tr>
<td>2. a. OK</td>
<td>Students measure oxygen production and water absorption in plants</td>
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<tr>
<td>b. 2</td>
<td>Students follow specific guidelines as they write a position statement on a current issue</td>
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<tr>
<td>c. 2</td>
<td>Students edit letters to the editor</td>
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<tr>
<td>d. 2</td>
<td>OK</td>
</tr>
<tr>
<td>e. OK</td>
<td>OK</td>
</tr>
<tr>
<td>f. OK</td>
<td></td>
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<tr>
<td>3. a. OK</td>
<td>Explain the process of photosynthesis</td>
</tr>
<tr>
<td>b. 3</td>
<td>Using the guidelines taught in class, write a clear, effective argument about...</td>
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<tr>
<td>c. 3</td>
<td>How is a zone of high pressure indicated on a map?</td>
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<tr>
<td>d. OK</td>
<td></td>
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<tr>
<td>e. OK</td>
<td></td>
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<tr>
<td>f. 3</td>
<td></td>
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