

BSC 307 Laboratory Assignment

One of the greatest challenges to the secondary science teacher is the creation, implementation, and evaluation of quality laboratory experiences. The purpose of this assignment is to get you to begin thinking about the role of laboratory work in the secondary science classroom and how its effectiveness can be optimized.

To that effect, you will be designing and teaching a lab to your peers using the 5E model. The requirements are listed below...

- a. Your laboratory activity should consist of a prelab session, a laboratory experience, and a postlab session. Your entire teaching session should be 40-45 minutes in length. If it is not possible to do all 3 components during that allotted time, you must adequately describe the component you are leaving out to the class. Note: you cannot leave out the actual laboratory experience.
- b. You need to provide the following materials at the time of your presentation:
 - i. Sufficient lab materials so students can work in pairs (if not individually)
 - ii. Lesson plan based on the 5E model (posted on WIKI)
 - iii. Teacher's guide (posted on WIKI) that includes:
 1. Purpose
 2. Concepts/objectives/standards
 3. Materials/preparation guide (including what should be at each lab station)
 4. Time/length of lab
 5. Safety issues
 6. Prelab/postlab discussion guide
 7. Any special notes
 8. A diagram of the lab set up with instructions as to the distribution of materials, things that need to be refilled, etc.
 - iv. Student sheet (copies for instructor & all students) that would be given to the students in your classroom.
 - v. Completed Basic Lab Consideration form (posted on WIKI).

Please note: These activities are to be done with the class as if you are the teacher and we are the students. You are to be prepared, dressed appropriately, and have all materials (including handouts) ready to go the night of your presentation.