

### Final Products for Investigation 3 20% of total grade for 341

Major due dates:	Item
April 19	Lesson plan for microteaching (Part B)
April 21&25	Microteaching
April 26	Presentation of poster & executive summary (Part C)
April 27	Written report of curriculum evaluation (Part A)

#### Part A: Written report

The written product for this investigation is an evaluation of your kit, synthesizing the results of your expert area analyses in a recommendation for the utility of the kit and modifications to make it align with all expectations. Your evaluation will be guided by the construction of an Alignment Table, where you will literally line up the goals, learner conceptions, kit learning objectives, kit activities, kit assessments, and large-scale assessments – then remedy gaps and misalignments through suggestions for additional resources or modifications. Your paper will include:

1. Executive summary
  - a. *Summary of major findings of paper, recommendations for kit modifications.*
2. Introduction and overview
  - a. *Purposes for conducting this investigation, methods of evaluation, description of curriculum, overview of questions/issues of investigation*
3. Findings from expert area analyses (content, standards, prior knowledge, assessment, methods of inquiry)
  - a. *How the kit measures up to the research you found on your expert topics*
4. Discussion of findings and Alignment Table
  - a. *Synthesize the findings from the expert areas and use the table to show the kits' strengths and weaknesses. Provide an overall judgment of the quality of the kit as it stands.*
5. Suggested additional resources
  - a. *Based on your assessment of the kit, suggest resources, methods, or modifications that would "fill the gaps" in your table and make the kit better overall.*
6. Conclusions
  - a. *Summarize your major points and overall effectiveness of modified kit. Discuss importance of this type of evaluation for teachers of science.*
7. References (APA style)

### Part B: Teaching Plans

You will use the blocks version of the teaching plans template to prepare for and enact your two 30-minute microteaching lessons, complete with their assessments. The lessons in the teacher's guide will form the core activities for your lesson. You must modify plans to fit the needs of your learners, your allotted time, and best practices (models of inquiry) as discussed in class. The parts of the plan include the items listed below.

1. **Guiding Information.**
  - a. Student Characteristics
  - b. Prior Knowledge
2. **Purposes.**
  - a. Major concepts
  - b. Broad learning goals
  - c. Objectives
  - d. State Standards
3. **Rationale.**
4. **Classroom Preparation.**
  - a. Instructional materials & safety
  - b. Management/grouping patterns
5. **Teaching Methods.**
  - a. Motivational opening
  - b. Core learning activities
  - c. Critical questions
  - d. Closure
6. **Evaluation Strategies** (Assessment)
7. **Annotated Bibliography** (APA style)
8. **Reflections\*\*** (not a part of the plans assignment – to be completed individually after teaching)
9. **Attachments.**

### Part C: Conference Presentation

You will present the results of Part A to the class, but in a conference poster session format. For this event, to be held **Tuesday, April 26, 4-6pm**, you will prepare a free-standing poster (4x4 folding) on the results of your evaluation. You will have a table to use for your display. In addition to your poster, you may wish to include selected parts of the kit, supplemental materials, etc. In addition, you will provide copies of your executive summary (1 page) for distribution to members of the class and visitors. Science and education experts from the university, from the state, and from local school districts will be in attendance during the session to ask questions. Be prepared to talk about your project with these guests. You will also be responsible for peer-evaluating other groups' presentations. In designing your poster, please think back to your experiences at the New Castle County Science Fair. What made for a successful poster at the science fair? Please incorporate these characteristics in your poster presentation.