ECI 306 Midterm Study Guide

**Chapter 1** What is scientific literacy?

 Describe the technological design cycle.

**Chapter 2** Summarize the eight scientific processes.

 What are the three types of investigations and how are they applied in the classroom?

**Chapter 3** What are the methods teachers use to enhance the learning of science with understanding?

 Give an example for each method you identify.

**Chapter 4** Define and describe the 5 E’s of the 5 E model of science instruction.

 Describe two other instructional approaches to teaching science.

**Chapter 5** Know and describe the ABC’s of objectives.

**Chapter 6** Compare and contrast assessment and evaluation.

 Define diagnostic, formative, and summative assessment.

 What are the characteristics of informal, traditional, and performance assessments?

**Chapter 7** How are closed and open-ended questions related to convergent and divergent thinking?

 How can a teacher respond strategically to nurture and extend children’s ideas during inquiry?