

COURSE ASSESSMENT REPORT

Course Number: 3650:292

Instructor: Tim Vierheller

Course Title: Elementary Classical Physics II

Semester: Spring

Year: 2005

1. Course Learning Outcome(s) Being Assessed

1. Define basic concepts related to electricity such as voltage, current, capacitance, resistance, and inductance and make related calculations.
2. Calculate magnetic fields and forces.
3. Understand the electromagnetic spectrum and its relationship to everyday situations (radio, TV, x-rays, visible light, etc.).
4. Understand and make associated calculations connected with the bending and reflections of light.

2. Instructional Techniques to Achieve the Course Learning Outcomes

The class lends itself to traditional lecture, problem-solving sessions (including group work), and hands-on lab activities.

3. Assessment Activity(ies) to Measure Student Learning (pre- post-tests, quizzes, exams, projects, assignments, self-assessment, in-class exercises)

American Association of Physics Teachers Introductory Physics Examination used as a pretest (taken first week in the semester) and posttest (15th week).

4. Results/Observations on each activity

Set as criteria that students will demonstrate mastering of the skills by scoring at least 90% on the posttest. The Pretest score was 37% with no student scoring more than 55% on the test. The overall final score was 85% with 75% of the students scoring 90% or more.

5. Based on above Results/Observations, Suggestions for Better Achieving Course Learning Outcomes

Developing more visuals materials from various sources connected with the text. This will include using PowerPoint and integrating into the presentations JAVA programs to better illustrate various physical principles. I plan to utilize feedback from the new student evaluation instrument to assist in this process.