

Classroom Observation Form

Instructor: David Bjergaard

Date/Time: _6:00-8:00pm Feb 29th, 2016

Location: Rm 154, Bio Sci

No. of Students: 22

Course Title: Introduction to Classical Mechanics (Physics 151 D10)

Topic(s) of Day: Conservation of Energy, Midterm, Conservation of Momentum

Instructor

- a. Engagement and Motivation of Students (build rapport, ask relevant questions, equitable social interactions) Could you specifically pay attention to interactions where I correct students? I observed a review session and a quiz session in that visit. As for the engagement and motivation of students, I found that David well accomplished this goal using the following teaching methods: 1) When he wanted to decide whether to give the quiz in the middle of the class or at the end of the class, he asked all the student to vote for that to decide, which I think is a good way to avoid any further questions; 2) When in the review session, he divided a complicated question into steps, and asked and corrected the students step by step to make sure they can follow and understand the mechanism of the question; 3) He used the group discussion to let the neighboring students to discuss the question, which tried to make everyone to think instead of waiting for other's answers or instructor's correct answer; 4) For one question involved with some graph plotting, he told the students a web page to help them plot the graph to get vivid impression of the question; 5) For some critical questions, he led the discussion to let the students first guess the best answer for the initial step, then corrected and guided them to explore the final correct answer instead of directly answering that question, which gave enough time for students to consider the question more actively by themselves; 6) He introduced a reward mechanism that if any student could correct one error in his notes on the blackboard, that student could get a candy as a reward, which encouraged students to double check the information that the instructor taught in the class, in order to help them think independently and critically.

General Comments & Summary (on the class, outcomes, recommendations)

* Be affirming, descriptive, and focus on specific behaviors

In sum, David well behaved as an instructor for this undergraduate class to help the students think critically and actively by the using of the above teaching strategies in the review session. However, there were some aspects that may need to be improved in the future: 1) there was a student arriving the class 10 minutes late, and would it be better to reemphasize the policy to him? 2) When the students were asked to discuss in groups, some students were actively talking while others were barely talking to the neighbors and reluctant to answer the question loudly in the class. It would be better to find a way to mix-match those active students with the shy ones to improve the open discussion for all of them. 3) When the students were asked to plot a graph using the web page on their laptop, I noticed many students did not take a laptop, and had to share the laptop with others. I wondered whether it would be better to inform them in advance to let them all have the laptop in the class.