

## **Clickers in PHYS 114-01 – Spring, 2012 - FAQ**

Students taking Physics 114 will be required to use clickers in the classroom. The textbook package sold in the bookstore contains a coupon good for \$10 off the price, and the clicker may be sold at the end of the course, so that the financial investment is not great.

Clicker responses will count for 7% of the course grade, of which 60% is for participation, 40% for correct answers.

### **What are clickers?**

A clicker is a small electronic device with buttons allowing the student to choose an answer to a multiple-choice question. The unique ID of the clicker and the answer are transmitted to a receiver in the classroom.

### **How will they be used?**

In two ways:

1. At the beginning of the class, there will be an easy question on the material that was supposed to have been read for that class. Answering this question means that you are present at the beginning of the class.
2. During the class, a question may be posed. There may be some discussion of the question in the class, before students give a final answer. Such questions may or may not count for marks, but will count for participation.

### **Does this mean that I will lose marks if I miss a class or come late?**

It might. But, the lowest couple of days' scores will be dropped, so there will be no penalty for missing 1 or 2 classes. In addition, there will be an automatic option to replace the clicker marks with an equal number of marks from the tests (midterms and final) if that will raise your mark.

### **What if I forget to bring my clicker to class?**

Don't forget.

### **Suppose I can't make the class. Is it ok to give the clicker to a friend to bring in my place?**

Absolutely not! This would be considered as a form of cheating (with all that implies).

### **If I don't want to use a clicker, can I use my smartphone / laptop instead?**

This may be possible in the future, but not yet.

**Isn't this unfair to demand more of my time and attention in this course?**

If you are a conscientious student who would do the required work and perform well in the course, this might be true. Remember, there is always the option to use your test results instead. The fact is that most students in this course do not perform very well and it is hoped that they will benefit from this approach. Last semester, most students were glad to use the clickers.

This is an experiment, that has been used in many other institutions, and the results suggest that most students and instructors say that the clickers are a benefit.

**What is the downside (negative effect) of this approach?**

Some cost (financial), the some loss of lecture time. This time can only be made up by students working more outside of class – reading ahead, going through penncast examples, etc.

Michael Freeman, January, 2012