

# Conceptual Physics 2009-10

Instructor	Mr. Greg Lowe
Web Site	www.greglowe.com/physics
Text Book	<i>The Physics Laboratory</i> by Marcus Milling Free online book for the 2009-10 school year
Periods	Period 7 & Period 8

<u>Quarter Grades</u>	<u>notes</u>
Tests 30%	2 per quarter
Quizzes 15%	2 types: online and in-class
Homework 15%	usually every night something is due!
Lab Work 30%	broken down into several categories
Participation 10%	lecture & discussion activities (follow class rules)

## Further Breakdown:

<b>30%</b>	<b>Tests</b>	
	Test 1	15%
	Test 2	15%
	(sign the science contract, and your better score is 20%, lower is 10%)	
<b>15%</b>	<b>Quizzes</b>	
	Online quizzes	5%
	In-Class quizzes	10%
<b>15%</b>	<b>Homework</b>	
	Worksheets	5%
	Online Homework	10%
<b>30%</b>	<b>Lab Work</b>	
	Lab written work	10%
	Focus, involvement, follow rules	10%
	Lab quizzes	10%
<b>10%</b>	<b>Lecture Participation</b> (using Active Expression handheld devices)	
	PQ – Participation questions	5%
	RQ – Real questions (graded)	5%
	Classroom shenanigans will cause a subtraction from this 10%	

Classroom Activities can be broken down into 4 different “types”

1. Lecture & Discussion
2. Lab Work
3. Homework & online activities
4. Assessment

## **1. Discussion / Lecture**

Students are expected to be *in their seat* (a seating chart will be used) when class begins and have paper & writing equipment on desk. They will be quietly working on the warm-up problem. They must do their own work and not talk to others. After warm up portion is completed and we are not doing lab, students are expected to take notes, ask questions, and listen while others talk. Students are expected to raise their hand if they have something to ask or add to the conversation.

In a 2-week period, expect 2 or 3 of those 8 days to be in this format. Students will be prompted to answer questions during the discussion and enter their answers into their Promethean handheld devices. Active Expression participation questions go into participation points (10%)

Two types of questions will be displayed on the front board: PQ & RQ

- PQ – A question that prompts the student to think about something new and give their best answer. You get credit for attempting the problem.
- RQ – A “real” question. This is usually from something you have already seen and you are given the opportunity to show that you have mastered the material.

## **2. Lab Work**

This is perhaps the most important component of your 9<sup>th</sup> grade Physics class. Labs are designed so that you can make observations about the world in which we live and then draw conclusions based on your observations. Instead of the teacher *telling you* what something does, at The Bishop's School, we believe that you will have a much greater understanding of nature by *observing* what it “does”. What kind of patterns do you see? What conclusions can you come up with based on the patterns? Can you formulate some of the laws of nature based on your observations? We believe you can. And don't worry, because even when it gets challenging, you will have a teacher ready to assist you in your observations (note: we will not simply give you the answer!). You also work with a new partner each lab, and between the two of you, you should be able to solve nature's mysteries!

- 10% = lab write ups (answering questions in the labs, drawings, etc.)
- 10% = How well you work in the lab environment. Only talk to lab partners, put equipment away, treat equipment with care, follow instructions in each lab, and don't fake your answer and put in something you didn't truly observe!
- 10% = Lab quizzes will be based on lab work. Some will be in class, some at home online. You will be allowed to use your lab write-up on the lab quizzes.

\$ Purchase = One 3-Ring Binder that is ½ inch thick. You will keep all Labs in this.

## **3. Homework and Online Activities**

Expect homework every night in Conceptual Physics. Most nights you will have 3-10 questions online. If you don't have access to a computer, then it is your responsibility to use a school computer to answer your questions. Sometimes you will be given a worksheet to work on at home. These worksheets reinforce labs and discussion material. When they are due you are expected to have them on your desk and completed when the class starts. Sometimes you will be assigned your lab write-up for that night, and if the lab is particularly long, you could get multiple days to complete it.

#### **4. Assessment**

assessment |ə' sɛsmənt|

noun the evaluation or estimation of the nature, quality, or ability of someone or something  
(the “something” is YOU!)

**Tests:** A test is much different than a quiz. There will be 2 tests during each quarter. The first is 15% of the quarter grade, the second is also 15%. However, if you sign the *science contract* and meet with me to go over it one-on-one, I will weigh your better score 20% and your lower score 10%. What is the science contract? That’s a good question. Ask!

Expect some of the major points & concepts to carry over from the first test to the second test, so if a student does poorly on important ideas on the first test, they will get another chance to show that they have studied that material and have gained a better understanding on the second test.

**Online Quiz:** These are designed for you to get ready for real quizzes and tests. They will usually cover material that reviews major ideas that we are trying to master and that will be on any upcoming Quiz or Test.

**In-Class Quiz:** These are taken at the beginning of class. They usually last 10-15 minutes. There will be a time limit. Not nearly as stressful as a Test, and some may think these are easier than Tests. They will be announced ahead of time.

#### *Classroom Expectations*

We strive to have an environment that will best support learning in the classroom. I respect that students have different learning styles. You will see that most of the different learning styles will be experienced in this class. I have a few rules that I ask everyone to follow. Repeated failure in this regard will have a significant impact on your grade and also merit a parent conference.

I expect all students to be in their desk and working on the warm-up question when the class starts. I expect every student to come prepared with something to write with, something to write on, and their class notebook.

#### Lecture / Discussion:

- Raise your hand if you want to contribute to the conversation or ask a question.
- Absolutely no gum, food, drinks in the classroom.
- Never leave your seat during lecture/discussion without permission.
- Never leave the classroom during lab.
- Any conversation that is off-topic will not be allowed.
- Any questions about grades, how I graded your work, or test dates & quiz dates are not allowed in class. Come see me after school or send me an email to discuss this.
- Push all chairs back in under desk

#### In Lab:

- It is OK to be standing or moving around in working with your lab equipment.
- Treat your equipment with respect! Guard against damaging items.
- Put all equipment back, and leave the class in better shape than you found it.
- Work with your partner only. Do not discuss anything with other lab groups.