

IB Physics Summer Packet

2017-2018

Congratulations on taking the first step toward enrollment in IB Physics. Although you will most likely find the class to be very fun and applicable to everyday life, you will also find this 2-year course to be challenging as a result of the fast pace, the high level of mathematical integration, and the way in which course content is required to be synthesized. You will quickly realize that creativity is a necessary skill since many of the problems you will work seem to look nothing like the ones we have practiced (but the underlying concepts will be the same). IB Physics tests your depth of knowledge by having you apply familiar physics concepts in an unfamiliar or unique setting. Please keep in mind that the pre-requisite for admission to IB-Physics HL is successful completion of Algebra 2/Trigonometry and the co-requisite is enrollment in Mathematics HL.

The intent of this assignment is not to provide you with busy work, but rather to test your mathematical skills in order to ensure that you have the requisite math background to make your time in IB Physics more enjoyable. The assignment will also introduce you to Internal Assessment (lab) portion of IB Physics through the “Measurement Error and Uncertainty” packet and the “IB Physics Summer Lab Practical” assignment.

Please work alone on the math assignment since the purpose is to help you assess *your* mathematical skills. Please feel free to form groups to help each other with the Summer Lab Practical. Your lab and data need to be unique, but you can help each other as you develop your laboratory skills. Here are some details on each of the four assignments:

Introduction:

Please email me introducing yourself. Please make sure I get this information by July 10th.

Due date: July 10, 2017. Submitting early is great!

Draft an email to me following these rules: Use clearly written **full sentences**. Do not abbreviate words as if you are texting your friends. Use **spell check!** This is a *professional communication* like the ones you will have with your college professors, so start practicing now! (*I will take off 1 point for each error...*)

- a. Address it to me at trousseau@bcsd.org
- b. Make the **Subject:** “IB Physics: Introduction to <Insert Your Name Here>”
(Do not include the quote marks or the brackets, just the words)
- c. Begin the email with a **formal salutation**, like “Mrs. Rousseau,” or “Dear Mrs. Rousseau,”
- d. Now introduce yourself (your name) and tell me a little about yourself, like:
 - What do you like to do (hobbies, sports, music, etc.)?
 - Do you have a job (summer, year-round, etc.)?

- Do you have any idea what your college major/career plans are? (No pressure – just wondering if you started looking at schools)
- What was the last book you read for fun?
- Anything else I should know about you?

Math Review:

Appropriate work should be shown for the problems on pages 4 through 9 on a separate sheet of paper. Please see the directions on the top of each page for more specific instructions.

Measurement Error and Uncertainty:

All work should be shown in solving the four problems at the end of the packet.

Summer Lab Practical:

It is recommended that you word process your report. The data table can be done in Excel or by inserting a table in Word.

Packets are due on the first day of school *with no exceptions*. I suggest you do this packet early and store it in a safe location. I will offer a brief help session on Thursday, August 17th from 10 to 11:00 AM in room 328. **You can also turn in the completed packet to me during the help session on August 17th for extra credit.** Any questions can be directed to me at trousseau@bscsd.org. Please note: I will not check my email the weeks of July 16 - August 1.

Enjoy your summer, get plenty of rest, and be ready to work hard in September!

Mrs. Rousseau