

Physics 12

COURSE OUTLINE

Overview

Physics is the study of the physical world. Physicists investigate the nature of matter and energy and how they are related. Physics 12 is a continuation of Physics 11, using the principles and problem solving skills already developed to further study the relationship between theory and application. Students who have interest in physics, engineering, astronomy, game design, medicine, etc. will find this course pivotal in their future career goals.

Prerequisites: Physics 11 and Math 11

Course Content and Timelines

The timelines suggested are based on a 10 month Fall course September to June. Timelines should be adjusted based on each students situation.

Unit 1: Physics Review (4 weeks)

Unit 2: Equilibrium & Torque (5 weeks)

Unit 3: Circular Motion (4 weeks)

Unit 4: Momentum (4 weeks)

Unit 5: Electrostatics (5 weeks)

Unit 6: Electromagnetism (4 weeks)

Unit 7: Induction (4 weeks)

Unit 8: Modern Physics (4 weeks)

Course Materials

No textbook is required. Course content is delivered on our Moodle platform by videos, online links and associated worksheets.

Assessment Information

Learning Guides	10%
Quizzes & Reflections	10%
Projects	20%
Unit Exams	20%
Midterm Exam	15%
Final Exam	25%

Learning Guides:

Each unit contains one learning guide within the lesson. You will need to download and print out the learning guides in order to fill them out. Show all your work in a neat and tidy fashion to receive full marks for the learning guides. If you are having trouble getting to the answer in the answer key, research the topic further, then ask for help if you are still struggling. Once the learning guides are complete, they are to be scanned and uploaded as **pdfs** to the assignment submission box for marking.

Test

Each unit will have a unit test at the end of it. These are online tests written on the course website. The tests are password protected so you will need to sign up at one of our test centres to have a supervised writing. Please refer to our school website www.deltaaccess.ca and click on the Book a Test? tab for information.

Quizzes

Each unit contains quizzes. The quizzes are designed as a self-assessment for students to demonstrate understanding of the course content and curricular objectives. These do not have passwords so you are free to write on your own and have two attempts to show mastery. The top mark for each quiz with multiple attempts will be the only one saved to your grades.

Projects

Projects allow you to make some choices on how you wish to enhance your understanding. As you work through units, look for projects that will enhance your understanding in areas of interest and/or weakness. The instructions for completing the projects are on each separate project.

Self-Assessment & Reflections

These allow you to reflect on your efforts and understanding. They will be a part of your grade.

Reporting

Weekly Progress Reports

These will be sent to both students and parents through the Moodle website. The reports are sent via email based on contact information provided on the course introduction forms filled out. Please make sure you Moodle profile is up to date with this information to ensure they are received. If you need assistance with this, please contact your teacher to help you make sure you are getting these reports.

Report Cards

These will be issued for the in late November, January, March, June and early August to meet the needs of post secondary admissions. Students needing marks for post secondary must complete the course within the guidelines provided by teachers so their marks are uploaded for transcripts.

These reports are available for Delta School District students on our student management system. For those not attending one of our high schools. Please call our Continuing Education office 604-940-5550 to receive a copy.

Only students who have done enough work to meet the activity requirement for the course will get report cards by the term deadlines outlined by their teachers. Even if you are getting progress reports you are not considered an active (official student) until this is met. For this course the first unit test must be submitted and assessed for the activity requirement to be met.

Course reports are based on only what has been submitted for the Fall until April 1st and for the Spring/Summer until July 15th. At this time all missing assignments will count in grade calculations giving students a realistic picture of current course standings. It is important when viewing report cards and progress reports up until this point that the amount of the course completed is taking into consideration. (ie. 90% standing in a course that is only 10% complete is very different than 90% in a course that is 80% complete)

Plagiarism

Plagiarism and Academic Dishonesty

Plagiarism is the unauthorized use or close imitation of the language and thoughts of another author and the representation of them as one's own original work, as by not crediting the author (Dictionary.com) http://dictionary.reference.com/browse/plagiarism

Plagiarism can be done either intentionally or accidentally. Regardless, it is an academic offence that carries with it varying levels of consequences – from a mark of zero for work submitted to expulsion from the course and/or on-line program. Plagiarism takes various forms: copying another's work, not citing another's original work, cutting and pasting from the internet and claiming the work as your own, allowing other

students to copy and submit your work as their own, and so on. It is YOUR RESPONSIBILITY to be aware of the rules around using and citing other people's work.

An excellent website that answers questions about plagiarism can be found at:

http://www.plagiarism.org/

http://www.grammarly.com/

http://www.englishclub.com/writing/plagiarism.htm

http://australianhelp.com/plagiarism

If you are uncertain as to whether you may be plagiarizing someone's work, check with your teacher or consult the many websites that outline the rules.

If a student is found to have submitted plagiarized work, the Delta Access teacher will notify both the student and Delta Access administration to document the violation and to determine further consequences. Repeated occurrences of plagiarism will likely result in a final mark of "Failure" in the specific on-line course.

Contacting your Teacher

You can contact me using the moodle messenger or using pgrant@deltaschools.ca. If you are struggling with any of the concepts or having trouble with the site, contact me and I will be happy to help you.

If you have any concerns that can not be addressed by your teacher please contact Delta Access — deltaaccess@deltasd.bc.ca or call 604-599-6398