

Physics 12 (eak ...020810)

Content	Teaching Strategies/Learning Activities	Assessment	B.C. Curriculum Organizer Linkage
<p>A. Kinematics</p> <ul style="list-style-type: none"> - Review of 1-D Kinematics - Relative Velocities - Projectile Motion <p>B: Dynamics</p> <ul style="list-style-type: none"> - Review of 1-D Dynamics - 2-D Dynamics <p>C: Mechanical Energy and Vector Momentum</p> <ul style="list-style-type: none"> - Review of 1-D Momentum - Review and Development of Energy - 2-D Interactions 	<p>1. Text used: <i>Physics 6th Ed., D. Giancoli</i> (Chapters 1 - 4)</p> <p>Lessons as noted in the course timeline (see page 4)</p> <p>2. Laboratories, homework and review assignments as tentatively noted in the course timeline.</p> <p>3. Handouts and Problems:</p> <ul style="list-style-type: none"> Introductory Worksheet Kinematics Review Questions Selected Force Questions Sample Exam Questions 1&2 	<p>1. Assigned work will be reviewed at the beginning of the next class.</p> <p>2. Brief quizzes (unannounced) at least twice a week. Each quiz will normally be composed of two questions dealing with assigned work.</p> <p>3. Problems, worksheets and laboratories collected and checked upon completion.</p> <p>4. Chapter end tests:</p> <ul style="list-style-type: none"> Intro. Test (Feb. 11) Kinematics & Projectile Motion (Feb. 17) Kinematics & Dynamics (March 1) <p>5. Class participation and attendance at tutorials.</p>	<p>PLO A1-2 (Experiments & Graphical Methods) integrated throughout course</p> <p style="text-align: center;">B1, C1 - 2</p> <p style="text-align: center;">D1 - 2</p> <p style="text-align: center;">E1, F1 - 2</p>

Physics 12 (continued)

Content	Teaching Strategies/Learning Activities	Assessment	B.C. Curriculum Organizer Linkage
<p>D: Circular Motion and Gravitation</p> <ul style="list-style-type: none"> - Circular Motion - Gravitation - Satellite Motion <p>E: Equilibrium</p> <ul style="list-style-type: none"> - Statics - Stability and Balance <p>F: Electrostatics</p> <ul style="list-style-type: none"> - Review of Electric Charge - Electric Force and Field - Electric Potential and Potential Difference 	<p>1. Text used: <i>Physics 6th Ed., D. Giancoli</i></p> <p>(Chapters 5 - 7, 9, 16, 17)</p> <p>Lessons as noted in the course timeline (see page 4)</p> <p>2. Laboratories, homework and review assignments as tentatively noted in the course timeline.</p> <p>3. Handouts and Problems:</p> <p style="padding-left: 20px;">Centripetal Acceleration of Planets Electric Potential & Electric Energy Sample Exam Questions 3-5</p>	<p>1. Assigned work will be reviewed at the beginning of the next class.</p> <p>2. Brief quizzes (unannounced) at least twice a week. Each quiz will normally be composed of two questions dealing with assigned work.</p> <p>3. Problems, worksheets and laboratories collected and checked upon completion.</p> <p>4. Chapter end tests:</p> <p style="padding-left: 20px;">Circular Motion (March 25) Mid-Term Exam (April 14) Equilibrium (April 29) Electrostatics (May 20)</p> <p>5. Class participation and attendance at tutorials.</p>	<p>H1, I1</p> <p>G1</p> <p>J1 - 5</p>

Assessment and Evaluation

This course is a provincially examinable course, therefore each student must write a provincial examination at the end of the year. This examination will count 40% toward the final mark and will cover all the material listed above. The remaining 60% is the school mark. Tentatively final marks will be based:

- 40% on the provincial examination
- 24% on class work, laboratories etc.
- 24% on quizzes and unit tests
- 12% on the school mid-term exam

Calculators

A scientific calculator *is essential* for this course. A graphing calculator *is not essential* for the Physics 12 course and examination but will be very useful for the class if you do have one.

Physics 12 Course Timeline

The course timeline can be found at the following internet address:

<http://members.shaw.ca/ekwasniewski>

Explanation of Work Ethic Indicators

G

You arrive to class on time, prepared with all your supplies, notebooks, texts and other related materials. All your work (home and in class) is completed to the best of your ability. You are making every effort to meet deadlines and due dates and are doing your best to keep your notebooks up-to-date and in good order. During class you are attentive and focussed on the various tasks, assignments and projects. You work well in individual and group situations and you appear to be doing your best. You willingly participate and share ideas. You treat yourself, your peers and adults with the respect inherent in the Gospel values. You display good work habits and effort in all that you do.

S

Most of the time you arrive to class on time and are prepared with all your supplies, notebooks, texts and other related materials. Most of your work (home and in class) is completed to the best of your ability. Although you occasionally miss handing in an assignment, you are making an honest effort to meet deadlines and due dates. You usually do your best to keep your notebooks up-to-date and in good order. During class you are attentive and focussed on the various tasks, assignments and projects with only occasional lapses. You work fairly well in individual and group situations and, on most occasions, appear to be doing your best. You are willing to participate and share ideas. You treat yourself, your peers and adults with the respect inherent in the Gospel values. You display satisfactory work habits and effort most of the time.

N

You frequently arrive unprepared for class. You are sometimes missing supplies, notebooks, texts and other related materials. On occasion, you are reluctant to put forth the effort to keep your materials and assignments organized. Homework and assignments are often incomplete or poorly done. During class, you are sometimes unfocussed and easily distracted. You participate infrequently in class discussions. You sometimes treat yourself, your peers and adults with a lack of the respect inherent in the Gospel values. Your work habits need to improve.