

Science 10 Long Range Plan 2009-2010 Mr. Phelps

Course Overview:

The secondary science program is guided by the vision that all students have the opportunity to develop scientific literacy. The goal of scientific literacy is to develop the science-related knowledge, skills and attitudes that students need to solve problems and make decisions, and at the same time help them become lifelong learners— maintaining their sense of wonder about the world around them. Diverse learning experiences within the Science 10 program provide students with opportunities to explore, analyze and appreciate the interrelationships among science, technology, society and the environment, and to develop understandings that will affect their personal lives, their careers and their futures. Topics specific to this course include: Energy and Matter in Chemical Change, Energy Flow in Technological Systems, Cycling of Matter in Living Systems, and Energy Flow in Global Systems.

| | Dates: | <i>September 1 – October 7</i> | <i>October 8 – November 13</i> | | |
|--------------------------------|---------------|--|--|---|---|
| Topic: | | 1) Unit A: Energy and Matter in Chemical Change 24 Days | 2) Unit B: Energy Flow in Technological Systems 23 days | | |
| Resources: | | <ul style="list-style-type: none"> • Textbook: Addison Wesley Science 10 • Alternate text: McGraw-Hill Ryerson Science Focus 10 • You tube, Teacher tube • Learnalberta.ca • Blackgold school division website • Range of web 2.0 applications | <ul style="list-style-type: none"> • Textbook: Addison Wesley Science 10 • Alternate text: McGraw-Hill Ryerson Science Focus 10 • You tube, Teacher tube • Learnalberta.ca • Blackgold school division website • Range of web 2.0 applications | | |
| Instructional Approach: | | <ul style="list-style-type: none"> • Lecture • Group discussion • Individual reading • Lab activities • Investigations • Games • Videos | <ul style="list-style-type: none"> • Ch A1.1-A1.2 notes (GO: A1K) • Ch A2.1-A2.5 notes (GO: A2K) • Ch A3.1-A3.5 notes (GO: A3K) • Ch A1, A2, A3 Quiz • Naming Compounds Quiz • Unit A Exam (labs and activities are not included in this plan) | <ul style="list-style-type: none"> • Lecture • Group discussion • Individual reading • Lab activities • Investigations • Games • Videos • Oral and PowerPoint presentations | <ul style="list-style-type: none"> • Ch B1.1-B1.4 notes (GO: B2K) • Ch B2.1-B2.5 notes (GO: B1K) • Ch B3.1-B3.4 student presentations (GO: B3K) • Ch B1, B2, B3 Quiz • Unit B Exam (labs and activities are not included in this plan) |
| Special activities: | | <ul style="list-style-type: none"> ○ Naming compounds poker game ○ Thermite (only if safety permits) | <ul style="list-style-type: none"> ○ Domino uniform motion lab | | |

Science 10 Long Range Plan

| | <i>November 16 – December 16</i> | <i>December 17 – January 20</i> |
|--------------------------------|--|--|
| Topic: | 3) Unit C: Cycling of Matter in Living Systems 22 days | 4) Unit D: Energy Flow in Global Systems 14 days |
| Resources: | <ul style="list-style-type: none"> • Textbook: Addison Wesley Science 10 • Alternate text: McGraw-Hill Ryerson Science Focus 10 • You tube • Teacher tube • Learnalberta.ca • Blackgold school division website • Range of web 2.0 applications | <ul style="list-style-type: none"> • Textbook: Addison Wesley Science 10 • Alternate text: McGraw-Hill Ryerson Science Focus 10 • You tube • Teacher tube • Learnalberta.ca • Blackgold school division website • Range of web 2.0 applications |
| Instructional Approach: | <ul style="list-style-type: none"> • Lecture • Group discussion • Individual reading • Lab activities • Investigations • Games • Videos | <ul style="list-style-type: none"> • Ch C1.1 – C1.4 notes (GO: C1K) • Ch C2.1-C2.4 notes (GO: C2K) • Ch C3.1-C3.5 notes (GO: C3K) • Ch C1, C2, C3 Quiz • Unit C Exam (labs and activities are not included in this plan) |
| Special activities: | <ul style="list-style-type: none"> ○ Creating Sustainable Images (CSI) Performance Task | <ul style="list-style-type: none"> ○ Efficiency Game |

Evaluation:

All assignments, quizzes, labs and unit tests will be recorded and a cumulative mark will be calculated at the end of the unit. Assessments will vary from oral presentations, class participation, completion of work and general attentiveness. The final exam is worth 25%. Missing assignments will be recorded as a zero unless arrangements have been made with Mr. Phelps to complete the work.

| Category | <u>Unit A</u> Chemistry | <u>Unit B</u> Physics | <u>Unit C</u> Biology | <u>Unit D</u> Global Systems | Final |
|------------------------------------|-----------------------------------|---------------------------------|---------------------------------|--|--------------|
| Assignments, Labs & Homework | 40% | 40% | 40% | 40% | - |
| Quizzes | 30% | 30% | 30% | 30% | - |
| Unit Tests | 30% | 30% | 30% | 30% | - |
| Unit Total Marks | 100% | 100% | 100% | 100% | - |
| Final Mark | 19% | 19% | 19% | 18% | 25% |

August 2009

Science 10

| Monday | Tuesday | Wednesday | Thursday | Friday |
|--|---------|-------------------------|-------------------------|---|
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| | | 26 E.E.O Kickoff 9am | 27 Meeting day @ WCS | 28 Prep Day @ WCS (Smartboard inservice at Peace High Comp. room) |
| 31 First Day of Classes - Introductions and Assembly | | | | |

September 2009

Science 10

| Monday | Tuesday | Wednesday | Thursday | Friday |
|------------------------------|------------------------------------|--|---|---|
| | 1 - Chapter A.1 Chemistry | 2 - Complete Ch. A.1 - Chapter A.2 | 3 | 4 -Chapter A.1 Quiz |
| 7 Labour Day No School | 8 - Atomic Mass and Mass #'s | 9 | 10 - Naming ionic and molecular compounds | 11 |
| 14 - Solubility Lab | 15 - Naming Acids | 16 | 17 | 18 -Chapter A.2 Quiz |
| 21 Site Based PD | 22 - Chapter A.3 | 23 | 24 - Single & Double Replacement Lab | 25 - Balancing Chemical Equations |
| 28 A.T.A PD Day | 29 | 30 | | |

October 2009 Science 10

| Monday | Tuesday | Wednesday | Thursday | Friday |
|----------------------|-----------------------------------|---------------------------------|--|---|
| | | | 1 - The Mole | 2 - Chapter A.3 Quiz |
| 5 | 6 | 7 Chemistry Unit Exam | 8 - Chapter B.1.1 Physics - Sig. Digs. and scientific notation | 9 Day off in lieu of PT interviews |
| 12 Thanksgiving | 13 - Graphing and Slope | 14 - Uniform Motion Lab | 15 - Chapter B1.2 Velocity | 16 |
| 19 | 20 - Chapter B1.3 Acceleration | 21 - Chapter B1.4 Work | 22 | 23 - Chapter B.1 Quiz |
| 26 Site Based P.D | 27 - Chapter B.2 | 28 | 29 | 30 Halloween Celebrations - Chapter B.3 |

November 2009 Science 10

| Monday | Tuesday | Wednesday | Thursday | Friday |
|-------------------------|-----------------------------------|------------------------------------|---|------------------------------------|
| 2 | 3 - Chapter B.2 Quiz | 4 | 5 | 6 |
| 9 - Chapter B.3 Quiz | 10 Remembrance Day Ceremony | 11 Remembrance Day No School | 12 - Physics Review - Chapter C.1 Biology | 13 Physics Unit Exam |
| 16 | 17 | 18 | 19 | 20 |
| 23 | 24 | 25 - Chapter C.1 Quiz | 26 - Chapter C.2 | 27 |
| 30 Site Based P.D | | | | |

December 2009 Science 10

| Monday | Tuesday | Wednesday | Thursday | Friday |
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|---|--------------------|---|------------------------------------|------------------------------|
| | 1 | 2 | 3 | 4 |
| 7 - Chapter C.2 Quiz | 8 - Chapter C.3 | 9 | 10 | 11 |
| 14 - Chapter C.3 Quiz - Unit review | 15 | 16 - Chapter D.1 Climate and Biomes | 17 Biology Unit Exam | 18 Christmas celebrations |
| 21 Christmas Break | 22 | 23 | 24 | 25 |
| 28 | 29 | 30 | 31 | |

January 2010

Science 10

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|--------|---------|-----------|----------|--------|
| Monday | Tuesday | Wednesday | Thursday | Friday |
| | | | | 1 |

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|--------------------------|--------------------------|--------------------------|---|---|
| | | | | |
| 4 | 5 - Chapter D.2 | 6 - Chapter D.1 Quiz | 7 | 8 |
| 11 | 12 - Chapter D.2 Quiz | 13 - Chapter D.3 | 14 Diploma Exams Begin | 15 |
| 18 | 19 - Unit D Review | 20 Unit D Exam | 21 - Course Review - Make up time | 22 - Course Review - Make up time |
| 25 FINAL EXAMS | 26 | 27 | 28 | 29 Non-Operational Day |