## Berrien Springs High School Physics <br> Fall 2013 Instructional Sequence Aurora Burdick

Mission: The mission of the Physics curriculum is to spark an interest in and awareness of applications of physics in the everyday world, to expose students to the ideas and reasoning methods of physics, to sharpen the students’ skills as observers and experimenters, to develop an understanding of the basic laws of physics, to develop problem-solving skills, to appreciate the abstract beauty of concise mathematical formulations of natural laws, and to understand that the physical universe is described by the laws of physics.

## Program Schedule:

Note: Schedule subject to change based upon the dynamics of the class and the best interests of the students.
First Semester

| Date | Sect | Title |  |
| :--- | :--- | :--- | :--- |
| T Sep 3 |  | Introduction to Physics / First 9 Weeks |  |
| W Sep 4 | 1.1 | What is Physics? |  |
| R Sep 5 | 1.2 | Measurements and Experiments |  |
| F Sep 6 | 1.3 | The Language of Physics |  |
| M Sep 9 |  | Review Chapter 1 |  |
| T Sep 10 | 2.1 | Displacement and Velocity |  |
| W Sep 11 | 2.2 | Acceleration |  |
| R Sep 12 | 2.2 | (cont.) |  |
| F Sep 13 |  | Physics Video Friday |  |
| M Sep 16 | 2.3 | Falling Objects |  |
| T Sep 17 |  | Review Chapter 2 |  |
| W Sep 18 |  | Exam 1: Chapters 1 - 2 |  |
| R Sep 19 | 3.1 | Vectors |  |
| F Sep 20 |  | Physics Video Friday |  |
| M Sep 23 | 3.2 | Vector Operations |  |
| T Sep 24 | 3.3 | Projectile Motion |  |
| W Sep 25 | 3.3 | (cont.) |  |
| R Sep 26 |  | Review Chapter 3 |  |
| F Sep 27 |  | Physics Video Friday |  |
| M Sep 30 | 4.1 | Changes in Motion |  |
| T Oct 1 | 4.2 | Newton’s First Law |  |
| W Oct 2 | 4.3 | Newton’s Second and Third Laws |  |


| R Oct 3 | 4.3 | (cont.) |  |
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| F Oct 4 |  | Physics Video Friday |  |
| M Oct 7 | 4.4 | Everyday Forces |  |
| T Oct 8 |  | Review Chapter 4 |  |
| W Oct 9 |  | Exam 2: Chapters 3 - 4 |  |
| R Oct 10 | 5.1 | Work |  |
| F Oct 11 |  | Physics Video Friday |  |
| M Oct 14 | 5.2 | Energy |  |
| T Oct 15 | 5.2 | (cont.) |  |
| W Oct 16 | 5.3 | Conservation of Energy |  |
| R Oct 17 | 5.3 | (cont.) |  |
| F Oct 18 |  | Physics Video Friday |  |
| M Oct 21 | 5.4 | Power |  |
| T Oct 22 |  | Review Chapter 5 |  |
| W Oct 23 |  | Exam 3: Chapter 5 |  |
| R Oct 24 |  | Review Chapters 1-5 |  |
| F Oct 25 |  | Physics Video Friday |  |
| M Oct 28 |  | Review Chapters 1-5 |  |
| T Oct 29 |  | makeup day |  |
| W Oct 30 |  | makeup day |  |
| R Oct 31 |  | First 9-Weeks Exam |  |
| F Nov 1 |  | Physics Video Friday/End of Marking Period |  |
| M Nov 4 |  | Introduction to Second 9 Weeks |  |
| T Nov 5 | 6.1 | Momentum and Impulse |  |
| W Nov 6 | 6.1 | (cont.) |  |
| R Nov 7 |  | no class - Parent Teacher Conference |  |
| F Nov 8 |  | Physics Video Friday |  |
| M Nov 11 | 6.2 | Conservation of Momentum |  |
| T Nov 12 | 6.2 | Conservation of Momentum (cont.) |  |
| W Nov 13 | 6.3 | Elastic and Inelastic Collisions |  |
| R Nov 14 | 6.3 | (cont.) |  |
| F Nov 15 |  | Physics Video Friday |  |
| M Nov 18 |  | Review Chapter 6 |  |
| T Nov 19 |  | Exam 3: Chapter 6 |  |
| W Nov 20 | 7.1 | Circular Motion |  |
| R Nov 21 | 7.1 | (cont.) |  |
| F Nov 22 |  | Physics Video Friday |  |
| M Nov 25 | 7.2 | Law of Gravitation |  |
| T Nov 26 | 7.2 | (cont.) |  |
| W Nov 27 |  | Thanksgiving |  |
| M Dec 2 | 7.3 | Motion in Space |  |
| T Dec 3 |  | Review Chapter 7 |  |


| W Dec 4 |  | Exam 4: Chapter 7 |  |
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| R Dec 5 | 11.1 | Simple Harmonic Motion |  |
| F Dec 6 |  | Physics Video Friday |  |
| M Dec 9 | 11.1 | Simple Harmonic Motion (cont.) |  |
| T Dec 10 | 11.2 | Measuring Simple Harmonic Motion |  |
| W Dec 11 | 11.2 | (cont.) |  |
| R Dec 12 | 11.3 | Properties of Waves |  |
| F Dec 13 |  | Physics Video Friday |  |
| M Dec 16 | 11.3 | Properties of Waves (cont.) |  |
| T Dec 17 | 11.4 | Wave Interactions |  |
| W Dec 18 |  | Review Chapter 11 |  |
| R Dec 19 |  | Exam 5: Chapter 11 |  |
| F Dec 20 |  | Physics Video Friday |  |
| M Jan 6 | 12.1 | Sound Waves |  |
| T Jan 7 | 12.1 | (cont.) |  |
| W Jan 8 | 12.2 | Sound Intensity and Resonance |  |
| R Jan 9 | 12.2 | (cont.) |  |
| F Jan 10 |  | Physics Video Friday |  |
| M Jan 13 | 12.3 | Harmonics |  |
| T Jan 14 |  | Review Chapter 12 |  |
| W Jan 15 |  | Exam 6: Chapter 12 |  |
| R Jan 16 |  | Review Chapters 6, 7, 11, 12 |  |
| F Jan 17 |  | Physics Video Friday |  |
| M Jan 20 |  | no class - Martin Luther King Jr Day |  |
| T Jan 21 |  | Review Chapters 6, 7, 11, 12 |  |
| W Jan 22 |  | Second 9-Weeks Exam |  |
| R Jan 23 |  | Semester Final Exam |  |
| F Jan 24 |  | End of Semester |  |

