Integrated Physical Science Honors Course Syllabus 2016-17

This class utilizes the textbook *Conceptual Physical Science Explorations* (Hewitt, et. al., 2010). For a more detailed syllabus that includes unit objectives, see the IPSH Syllabus that can be downloaded from the class website.

	Topics/Units	Potential labs*
Semester 1	**Science Skills** Materials included in summer packet	• Measurement
	Newton's Laws Chapters 2-5	• Speed • Battery car • 2nd Law • Momentum
	Energy Chapters 6, 9	• Energy of a system • Specific heat (formal lab report)
	The Periodic Table Chapters 15-17	• Physical and chemical changes • Trends in the periodic table
	Chemical Reactions Chapters 17-18, 20-21	• Types of chemical reactions
Semester 2	**Waves** Chapters 12-14	• Harmonic motion • Doppler effect gizmo
	Climate Chapters 30-31	• Paleoclimates • CO_2 concentration activity • Ocean acidification • Climate feedbacks
	Electricity and Magnetism Chapters 10-11	• Circuits • Electrical stations • Motors and generators
	Energy Resources Project	• Research • Scientific poster presentation
	Geology Chapters 26-29	• Pacific Northwest tectonics • Stream table • WA geology flipbook
	Astronomy Chapters 32-33	• Steven Hawking's Universe video

* Specific labs may change as the course progresses