**IB Physics**

Chapter 6 Syllabus

Work and Energy

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| Block | In Class | Due  | If you miss this class |
| 1Jan 3/4 | -Calculating work-Energy-Potential and Kinetic Energy-Springs and force and energy |  | **Read:** 6.1-4**Watch:** Videos A-F |
| 2Jan 5/6 | -Introduction to Conservation of energy -Staring death in the eye-Conservation of Energy Whiteboards-Hand out FA and Practice 6.2 |  | **Read:** 6.5-9**Watch:** Videos G |
| 3Jan 9/10 | -Work on Practice 6.2-Power-Efficiency-Hand out FA and Practice 6.1 | **Check:** P6.2 1-4 | **Read:** 6.10**Watch:** Videos H-J |
| 4Jan 11/12 | -Rollercoasters -Work FA 6.1, 6.2-Energy Lab brainstorm | **Check:** P6.1 1-4 | **Watch:** Energy lab videos |
| 5Jan 13/17 | **Summative Assessments:****SA 5.2 - Vertical Circle****SA 5.3 – Gravity and Orbit****SA 6.1 - Work and Power****SA 6.2 - Conservation of Energy**  | **Turn In:** FA 5.1, 5.2, 5.3, 6.1, 6.2**Turn In:** P6.1, 6.2 1-4 |  |
| 6Jan 18/19 | -Energy Lab-Play with Coaster program | **Video Flip: Energy Lab ideas** **Check:** Ch 6: 19, 29, 58(28.2 s)(be sure to do the Problems - they start on p. 162) | Come in before or after school to make up the lab |
| 7Jan 20/23 | -Work on lab and problems  | **Check:** Ch 6: 39, 40(2.5r), 52(10. m/s) | Come in before or after school to make up the lab |
| Jan 24/25 | **Momentum!!!!** | **Turn In: Energy Lab****Turn In: Ch6:**19,29,58,39,40,52 |  |
| Jan 26/27 | **More Momentum!!!!!!** |  |  |
| Finals | **Final - (cumulative for semester)** |  |  |
| Assignments* 1 Lab:
	+ Either Human Power output or a lab of your own choosing
* 5 Formative/ 4 Summative Assessments:
	+ 5.1 – Centripetal Force and Acceleration\*
	+ 5.2 – Vertical Circle
	+ 5.3 – Gravity and Orbit
	+ 6.1 - Work and Power
	+ 6.2 - Conservation of energy
* 6 book problems:
	+ **Ch6:** 19,29,58,39,40,52

\*no summative | \*Handouts: |  |