**IB Physics**

Chapter 6 Syllabus

Work and Energy

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Block | In Class | Due | | If you miss this class | |
| 1  Dec 15  /Jan  2 | -Calculating work  -Energy  -Potential and Kinetic Energy  -Springs and force and energy |  | | **Read:** 6.1-4  **Watch:** Videos A-F | |
| 2  Jan  3/4 | -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 | |
| 3  Jan  5/8 | -Work on Practice 6.2  -Power  -Efficiency  -Hand out FA and Practice 6.1 | **Check:** P6.2 #1-4  **Turn In:** 6.2 #1-4 | | **Read:** 6.10  **Watch:** Videos H-J | |
| 4  Jan  9/10 | -Rollercoasters  -Work FA 6.1, 6.2  -Energy Lab brainstorm | **Check:** P6.1 #1-4  **Turn In:** P6.1 #1-4 | | **Watch:** Energy lab videos | |
| 5  Jan  11/12 | -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) | |  | |
| 6  Jan  16/17 | **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 | | Come in before or after school to make up the lab | |
| 7  Jan  18/19 | -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  22/23 | **Momentum!!!!** | **Turn In: Energy Lab**  **Turn In: Ch6:**19,29,58,39,40,52 | |  | |
| Assignments   * 1 Lab:   + Either Human Power output or a lab of your own choosing /40 pts * 1 Homework assignment:   + P6.1 and 6.2, 1-4 /64 pts * 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 /30 pts   \*no summative | | | \*Handouts: | |  | |