

# Rio Americano High School Physics

## PHY.05 Energy

[6/6/18]

### 1. M 11/26 – Cosmos: A Personal Voyage

\_\_Episode IV: *Heaven and Hell*

### 2. T 11/27 – Equilibrium

\_\_Springboard: Equilibrium

\_\_Read Guide: Equilibrium

\_\_YouTube: Equilibrium as Entertainment

\_\_Experiment: Uphill Climb (begin)

\_\_Complete Q&P < > Due \_\_\_\_\_

### 3. W 11/28 – Work Lab

\_\_Experiment: An Uphill Climb (finish)

\_\_LabQuiz + Post-lab discussion

\_\_Complete Q&P < > Due \_\_\_\_\_

### 4. r 11/29 – Work

\_\_Springboard: Work

\_\_Read Guide: Work / Simple Machines

\_\_Examples: Energy

\_\_Complete Q&P < > Due \_\_\_\_\_

### 5. F 11/30 – Potential Energy

\_\_Springboard: Potential Energy

\_\_Read Guide: Potential Energy

\_\_Complete Q&P < > Due \_\_\_\_\_

### 6. M 12/3 – Kinetic Energy

\_\_Springboard: Kinetic Energy

\_\_Read Guide: Kinetic Energy

\_\_Complete Q&P < > Due \_\_\_\_\_

### 7. B1 12/5 – Mini-Launcher Lab I

\_\_Learning the setup day

### 8. B2 12/6 – Mini-Launcher Lab II

\_\_Data collection and analysis day

### 9. r 12/4 – Energy Transformations

\_\_Sketches: Pole Vault and the Dart

\_\_Sketches: Bungee Jump

\_\_Complete Q&P < > Due \_\_\_\_\_

### 10. \*F 12/7 – Conservation of Energy

\_\_Springboard: Conservation of Energy

\_\_Demon: Nailed!

\_\_Read Guide: Conservation of Energy

\_\_Complete Q&P < > Due \_\_\_\_\_

### 11. M 12/10 – Power

\_\_Springboard: Introduction to Power

\_\_YouTube: Power Balance Wrist Bandits

\_\_Complete Q&P < > Due \_\_\_\_\_

### 12. B1 12/11 – Energy Demonstration

\_\_Demo: Physics in the Fountain of Fizz

\_\_Complete Job: Roller Coaster Physics

\_\_Mechanical Universe: *Conservation of Energy*

### 13. B2 12/12 - Energy Conservation

\_\_Conceptual Physics Alive: *Energy*

\_\_Complete Q&P < > Due \_\_\_\_\_

### 14. r 12/13 - Test Correction Journal Day

\_\_TCJ Quiz 3 (UCM+G) and TC Journal 4 (Mom)

\_\_Unit Work Return

\_\_PracTest PHY.05 (Online)

### †15. F 12/14 - Unit Test PHY.05: Energy

Course Work Folio

*Conceptual Physics* Textbook: Chapter 9 (Energy), 11.7 (Equilibrium)

Hewitt Drew It! YouTube Screencasts: (See <http://phyz.org/hewittdrewit>) MECHANICS: Energy

\*Make up Unit Test PHY.04 as soon as possible; no later than F 12/7. Check the availability schedule on the board to see when you can come in. Unit tests made up after the posted date may result in the loss of the in-class TCJ journaling privilege on TCJ Day. In that case, journaling will have to be made up at lunch or after school.

†Your TCJ for the previous unit must be complete by this date. Only students with complete TCJs can take the TCJ Quiz and earn back up to half the points they missed on the corresponding unit test.

### END-OF-SEMESTER SCHEDULE: READ CAREFULLY!

**Monday 12/17** – Physics of Car Crashes • **Make up Test PHY.05 if missed** • Complete TC Journal 4 Today!

**Tuesday 12/18** – TCJ Quiz 4 (Momentum) + TC Journal 5 (Energy)

**Final Exam Day** – TCJ Quiz 5 (Energy) before final exam

### FIRST SEMESTER FINAL EXAMS

**Wednesday 12/19** – 1, 2 • **Thursday 12/20** – 3, 4 • **Friday 12/21** – 5, 6

\*\*\* Missed make-ups must be completed during Final Exam days \*\*\*