

# Physics

## Energy Project

Each student in Physics will be responsible for recording and editing a 5-minute Energy Movie and constructing an Energy Poster, **constituting 8% of his/her second semester grade** for the course. Several progress checks will be made before the Energy Movie and Poster are due, and these checks (described below) will **constitute an additional 7% of the final semester grade**. The project is designed to give you experience researching an “alternative” energy source and developing a convincing argument for its promotion. Hopefully, it will also be fun!

The project may be completed individually, but I recommend working on it with a partner who you think will likely add significant time and effort to your enterprise (and who lives close enough to work together regularly). Each student will complete a self-evaluation detailing his or her individual contributions, so **it would be wise to maintain a log of your individual work on the project**.

### Energy Source Choice (due Tuesday, 21<sup>st</sup> February 2012) [200 check points]

The Energy Source Choice assignment is a paragraph describing your “alternative” energy source and briefly explaining why you feel this source holds the most promise for solving the dual problems of finite fossil fuel resources and global warming. You should also explain what video resources you will use to produce your 5-minute movie. For a two-person team, only **one** Energy Source Choice paragraph will be completed, but both partners should ensure that their names are included on the assignment or only one will get credit for it.

### Project Sources (due Monday, 12<sup>th</sup> March 2012) [300 check points]

Each team must submit a list of resources supporting the arguments that you plan to make in your movie. This should be in the format of a formal bibliography of the books, periodicals and web page URLs for your research. (**Note:** “The Internet” and “The Library” are **not** specific enough for your bibliography. Invest the time necessary to find your sources **now**, not later.)

### Movie Script (due Monday, 16<sup>th</sup> April 2012) [500 check points]

Each team will submit a detailed script for the movie they plan to record, including **all** of the following:

- Text to be spoken by the team member(s), noting which member will read each section of text. An outline for your talk will be **insufficient**. Instead, include a draft of the **actual text** to be spoken (approximately 5 minutes of text).
- Notes specifying where each “scene” begins and ends (i.e., the cuts), and the location where each will be filmed.
- A description of the props and other resources to be used in the movie, including when they will appear on camera and how/when the team member(s) will refer to them. Every movie must use at least one such resource, but several would be better.

## Energy Movie (due Monday, 30 April 2012) [700 project points]

You may use a cell phone or any other digital camera to record your movie. **However, you are responsible for obtaining all the equipment and software necessary to record and edit your movie,** and you must make **advance** arrangements to borrow anything you do not own yourself.

**No excuses will be accepted** for equipment or software that ultimately proved unavailable (or was not available soon enough) or failed to work properly despite your best efforts.

Assuming you **already** have a well-written and rehearsed script, plan on spending *at least 2* hours to record your video clips and another 5 hours of time editing those clips to produce your final movie.

Once you are finished editing your movie:

- Upload the movie file to <http://www.youtube.com>
- Ensure that your movie is **publically available** (e.g., load its URL into a web browser **without** logging into YouTube)
- Email your movie URL to [CSchneider@BitneyPrep.net](mailto:CSchneider@BitneyPrep.net)

## Energy Poster (due Monday, 30 April 2012) [200 project points]

Each group will create a poster illustrating their energy source and summarizing their argument with exciting graphics, diagrams, etc. These posters will be brought to class and put on display so that all students can what the other teams have done.

**Important:** Those who fail to turn in their Energy Movie and/or Energy Poster on Monday, 30<sup>th</sup> April 2012 will be punished by having to complete this assignment over STAR Testing Week.

**More Important:** Those who fail to turn in their Energy Movie and/or Energy Poster by the beginning of the class period on Monday, 14<sup>th</sup> May 2009 will receive **ZERO** credit, no matter what the circumstances. There will be **ABSOLUTELY NO EXCEPTIONS** without my **ADVANCE** consent (i.e., you must contact me **BEFORE** Monday.)

## Energy Movie Day (due Monday, 14<sup>th</sup> May 2012)

All of the Energy Movies will be shown in class on Monday, 14<sup>th</sup> May 2012, and the Energy Posters will be available for review then as well.

## Project Evaluation (due Tuesday, 15<sup>th</sup> May 2012) [100 project points]

Each **individual** will complete an evaluation of his/her project. The student should focus on documenting their own efforts, rather than criticizing his/her partner. The rubric for this evaluation will be provided separately.