

## Course Syllabus for ENVS 350:

### Spring Term 2013:

- Class Meets in Library 41 2-4 Monday/Wednesday
- There is no required textbook

### Course Title: The Ecological Footprint of Energy Generation

#### What does that mean?

The current ecological footprint of our energy and electricity generation takes the primary form of dumping waste heat into the surface layers of the ocean. In turn that leads to climate changes if that excess heat can't be mixed rapidly. The oceans are currently near their saturation point which means that the rate of climate change is [accelerating](#)

If we want to decarbonize the grid and move to sustainable energy sources then we must acknowledge that the biggest evil is CLIMATE CHANGE. All forms of alternative energy generation will have an ecological footprint - we must choose against the lesser of all evils. There is no other choice for us. The silver bullet solution does not exist. It especially doesn't exist if we can't curb global Consumption.

#### Instructor: *G. Bothun, Dept of Physics*

- Office/Lab: 417 Willamette Hall
- email: [dkmatter@uoregon.edu](mailto:dkmatter@uoregon.edu)
- office hours: 10:30-12 Tuesday, Thursday

#### TA: *Marissa Williams*

- email: [mwilli10@uoregon.edu](mailto:mwilli10@uoregon.edu)
- Office hours: To be Announced

#### Math Required:

- This course has a quantitative portion - mostly related to the homework assignments
- This course will make use of excel as a data organization and analysis tool

## **Grading and Course Requirements:**

- **Four Homework Assignments -- each assignment is worth about 10% of your grade; the assignments can be data intensive and you may collaborate with up to 2 other people (e.g. group size = 3) in doing the homework.**
- **One Midterm: probably in Week 6 -- worth 20% of your grade**
- **Comprehensive final -- worth 30% of your grade**
- **In class participation -- this is important -- many parts of this class are controversial -- show up with an informed opinion. In addition, if you do not come to class consistently, you will not do well on the exams (ask previous students about this if you don't believe me).**