PHGN419 Principles of Solar Energy Systems
Spring 2011, MWF 3:00-3:50pm, Berthoud Hall 206

Instructor: Joe Beach
Contact Information: Office phone 303-384-2176, e-mail jbeach@mines.edu
Web Site: http://inside.mines.edu/~jbeach
Office: Meyer Hall 447, first desk on the left.
Office Hours: M-F, 4pm-5pm

Description: The purpose of this course is to give the students a broad exposure to commercial photovoltaic technologies and the solar photovoltaic electricity industry. We will examine the solar resource, wafer silicon and thin film photovoltaic technologies, manufacturing methods, basic solar cell and module performance, the cost of solar electricity, and applications of solar electricity.

Grading: Grades will be based on weekly homework (60%) and a project. Homework is due at the beginning of class each Friday. Late homework will not be accepted. If you aren't finished with the assignment when it is due, please turn in what you have completed. Of course, arrangements can be made for extenuating circumstances.

Schedule: We will not be following the topic order in the text all of the time. Instead, we will start with cell technologies and then work our way through panel manufacturing, panel behavior, system design, system costs, and finally electricity costs.