Lecture: MWF from 2:00 - 2:50 Moulton 210
Instructor: Dr. David Marx
  Office: Moulton 312F   Phone: 438-5382
  e-mail: marx@phy.ilstu.edu
  Hours: M - F 11:00 AM to noon, Other hours via appointment or just drop in

Class Website: www.phy.ilstu.edu/~marx/phy207
  The class website will be frequently updated with materials from the class. You’ll want to check it often.

Topics
  Climate history of the Earth  ·  Worldwide and domestic energy use and needs  ·  Economics of energy  ·  Physics of work and energy  ·  Thermal physics  ·  Energy Sectors  ·  Petroleum  ·  Solar Power  ·  Wind Power  ·  Nuclear Power  ·  Pollution  ·  Energy Policy  ·  Climate Change

Required Materials
  For the course, you’ll need five things... that must be brought to every class...


(2) Registered TurningPoint remote response pad (clicker). This is available at both bookstores. It must be registered on your iCampus site at https://www.icampus.ilstu.edu/

(3) Journal notebook, which must be well kept. It will be turned in periodically for credit. This can be a spiral-bound notebook or a three-ring binder. It must be neatly hand-written and/or typed.

(4) General notebook for class notes and calculations, etc. This one will not be turned in.

(5) Basic, scientific calculator.
e-mail

I will frequently communicate with the class via a listserv that I have set up for the class. I have used your ULID e-mail address for the list. If you would rather use a different e-mail address, please let me know as soon as possible. Please check your e-mail for these very important messages.

Attendance

Lecture time will not be a simple presentation of material by Dr. Marx. In fact, Dr. Marx is expecting that you will read the textbook before coming to class, so he'll only have to give supplementary material, show additional examples, interactive demonstrations, short videos, but mostly, we'll have lots of class discussion and analysis. In other words, the lectures will be active, not passive. This will only work to maximize your learning in the course, if you actively participate.

Attendance is critical to your success in this course. If you cannot attend, please find someone that takes good notes and get a copy. A large portion of your grade is in-class participation. I will allow up to three absences without penalty, not including exams, during the course. Of course, arrangements can be made for a make-up, in the event of extreme illness or death of an immediate family member. If you are considering withdrawing from the course, please see me first.

Class Participation

It is expected that much class time will be devoted to interactive discussion on various energy-related issues. All students will be assigned to a small group and given a seating assignment. We will often have group activities and discussions as an aid to having a larger discussion with the whole class. Clickers will be used to collect your opinion on a variety of issues that will also help us gauge class opinion and assist us in our discussions. Notes taken during your discussions and ideas that come to mind should be recorded in your Journal during class. Groups or individuals may be given worksheets to fill in for credit.

Journals

As mentioned in the previous paragraph, one of the functions of your personal journal will be to record your thoughts and ideas during group discussions or during lecture. In addition, you will use them to write down thoughts and ideas that you have during assigned reading of the textbook. Following a reading assignment, you will be asked to discuss the readings within your group, therefore it is important to have read the book before coming to class. From time to time, you will also be asked to write short essays in your journal. The journals will be collected from time to time for grading throughout the semester. More information on the specifics of journaling and grading will be given to the class as a separate document.
Tests

There will be three or four written tests covering all lecture and reading materials from one test to the next. The tests take place during the lecture period. Everything we do in lecture, reading assignments, and homework is meant to increase your learning. What I care about is the things you learn that you will carry with you long after this course is over. I cannot ask everything on a test. That doesn't mean that anything not asked isn't important. It's all important and relevant.

The purposes of testing are...

1. to get students to review the material gain a further depth of understanding
2. to evaluate whether students know basic course content
3. to evaluate whether students have a sufficient understanding of concepts to apply course content

In your preparation for tests, you should not simply try to do some skimming through course materials and simple rote memorization. That will, generally, not work out well for you. Instead, your focus should be on continual learning of the content as you go through the course and not on trying to learn everything a few hours before a test. Again, you should be focused (for all of your courses, not just this one) on really learning things so you can have the skills you'll need for whatever job situation you find yourself in down the road.

A simple scientific calculator may be needed. If you know you will be absent on a test day, please arrange in advance to take the test. In general, no make-up tests will be given. The lowest grade among the three tests will be dropped. Anyone found cheating on a test would receive a zero for that test, which cannot be dropped.

Grading

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<thead>
<tr>
<th>Scale (subject to change)</th>
<th>Components</th>
<th>Components</th>
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<tbody>
<tr>
<td>A 88 to 100 %</td>
<td>Class Participation</td>
<td>25 %</td>
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<tr>
<td>B 78 to 87 %</td>
<td>Journal</td>
<td>25 %</td>
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<tr>
<td>C 68 to 77 %</td>
<td>Tests</td>
<td>30 %</td>
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<tr>
<td>D 58 to 67 %</td>
<td>Final Exam</td>
<td>20 %</td>
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<td>F &lt; 57 %</td>
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