Classroom Discussion and Lecture
The first class involved going over the syllabus and a discussion of project based learning (PBL). The need for an engineering journal was discussed as a requirement for the course and how it will be used with the course project. The instructor gave an overview of the wind turbine project including the importance of magnets in generating electricity. A brief tour laboratory followed. The instructor gave an overview of Excel and a series of examples of calculations using Excel. The Excel instruction continued with developing a spreadsheet for analyzing a sample magnet strength dataset. The spreadsheet will be used to analyze magnet measurement next week.

The second class we covered the one-page progress report required every two weeks. This one-page report will document the progress each student has made throughout the course. It will address three areas, the classroom activities, the reading and homework, and all team related activities. The report must also include the summary of any project related data.

The generator equation or Faraday’s Law was reviewed and its relationship to the wind turbine project. The instructor went over the use of a Gaussmeter for measuring the magnetic strength four magnets. We reviewed the importance of averaging measured data.

Reading and Research
I read chapter-1 of the textbook. This chapter addressed the various engineering disciples and what technologist do and completed the reflection assignment. I also read the assigned pages of chapter-3 and chapter-10. I have read over the Engineering Journal (EJ) handout and have setup my EJ with odd number pages and a table of contents in the first five pages. The first entry in the EJ is the Team contact information.

As part as the second homework assignment read the pages of chapter-2 and chapter-4 and completed the question set. I have also completed the magnet analysis Excel spreadsheet. I completed the first progress report for the first two weeks of the course.

Team and Project Activities
We formed project teams and exchanged telephone numbers and email addresses. After the instructor gave the students an overview of his background, each student gave the class a brief description of their background.

The second week the team measure the four ceramic magnets supplied by the instructor. Each team was also supplied with a steel plate to function as a magnetic backing plate. This plate increased the magnet strength over the individual magnets. The magnet data was shared in the team and entered in our engineering journals. The data was then entered in the Excel spreadsheet for analysis. The overall average of the data with a steel backing plate was 1350 Gauss (0.1350 T)