Quote of the Week: Mike Seiffert--"no, milliKelvins was last year, this year we’re resolving nanoKelvins"

Topics for this week:
Introduction to Course Structure, Study Guides, Homework, Projects.
The fundamental maths.
Intro to PSU Off-Grid Low-Data-Rate remote instrument project.
Defining and Dividing up the tasks
Review vector addition of complex voltage and EMAG signals
A generalised introduction to the Vector Network Analyzer (VNA)
A first look at Course Outcomes
Fundamentals of Math, Physics, Engineering
--applied to interesting small projects
Lots of interesting small projects in the world--insatiable appetite for cookbooks
Lots of fundamental theory in EE: Math, EMAG, Signal Processing, Circuit Theory, Electronics, Device Physics
This class combines the two--simple projects, deep and profound thinking--you need to be able to explain how it works. Expect to work with pencil and paper.

Homework: Sketch a low-data-rate wireless instrument block diagram including bandwidth, transmit power budget, proposed operating frequency etc. Turn in one page data sheet sketch at beginning of class Monday October 7.

Next graded work: HW1 due Monday October 7
In-Class Midterm exam Wednesday November 13