

## **ELEG 646; ELEG 446 - Nanoelectronic Device Principles – Spring 2011**

### **Course Device Design Project. - due Monday, 9 May 2011, in class.**

Design your concept of a device and describe its operation in terms of the topics in the course lectures and text. Format: 1 page of description, and 1 page of supporting analysis. 2 pages maximum – be succinct. For example, maybe you can make a new type of solar cell based on semiconducting liquids; or maybe you can solve the problem of a metal base bipolar transistor; or batteries based on stored charge at pn junctions. The limit is your imagination and your justifying calculations. Describe a novel device – not a new application for an existing device. Please use only your own calculations and your own drawn figures (drawing software ok) – web figures and copies of any other work will be automatically rejected and require resubmission - no exceptions.

Homework assignments will appear on the web at:  
<http://www.ece.udel.edu/~kolodzey/courses/eleg646s11.html>

Note: On each homework and report submission, please give your name, the due date, assignment number and the course number.