**ELEG 340: Solid-State Electronics, Fall 2008**

**Homework #2 - due Tuesday, 23 September 2008, at the beginning of class**

1. Problem 2.2, p. 56 of Streetman-Banerjee, 6th edition.

2. Problem 2.6, p. 57 of Streetman-Banerjee, 6th edition.

3. Problem 2.10, p. 57 of Streetman-Banerjee, 6th edition.

4. Problem 2.11, p. 57 of Streetman-Banerjee, 6th edition. Hint; use the method of Section 2.4.3.

5. Consider Figure 3.3 on p. 66 of Streetman-Banerjee, 6th edition. If Silicon were subject to uniform extreme pressure so that the atomic spacing was compressed slightly, what do you expect would happen to the bandgap, $E_g$? This effect is known as hydrostatic pressure, because it is applied in all 3 dimensions.

Homework assignments will appear on the web at:
http://www.ece.udel.edu/~kolodzey/courses/eleg340f08.html

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