Goals for Exam 2: ECE 656 Week 6, Monday, September 23, 2013 Mark Lundstrom Purdue University

The exam will be conducted in class and will consist of three questions. You should bring a calculator. A sheet of key equations will be provided.

This exam will test your understanding and ability to work with three concepts/topics:

- 1) A general understanding of topics in scattering: transition rates, Fermi's Golden Rule, characteristic times, scattering potentials and electron-phonon coupling, etc.
- 2) An understanding of the general features of scattering in common semiconductors, bulk and quantum confined structures
- 3) An ability to perform basic scattering-related calculations such as transition rates and characteristic times.