Goals for Exam 3: ECE 656 Week 9, Monday, October 14, 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 near-equilibrium transport, the coupled charge and heat equations, basic thermoelectric effects and coefficients, thermoelectric devices, etc.
- 2) An ability to evaluate thermoelectric transport coefficients for a given bandstructure and an ability to estimate the numerical values of various transport coefficients.
- 3) An ability to solve problems using the coupled current equations.