Goals for Exam 5: ECE 656 Weeks 13-14, Friday, November 22, 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) An understanding of the moment equation approach to solving the Boltzmann Transport Equation (BTE), the general prescription and understanding of the terms in the general balance equation, and the first few moments (continuity equation, current equation, energy balance equation.)
- 2) An ability to follow the prescription and generate and simplify balance equations for quantities of interest.
- 3) An acquaintance with the Monte Carlo (semi-classical) and NEGF (quantum) simulation approaches.