

Goals for Exam 1: ECE 656 Week 3, Thursday, September 6, 2013

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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 bandstructure, quantum confinement, and heterostructures and the very basic information about scattering.
- 2) An ability to work out sums and integrals and be familiar with Fermi-Dirac integrals.
- 3) An understanding of density-of-states (DOS) – how to compute a DOS and how to interpret a given DOS.