

Goals for Exam 2: ECE 656, Thursday, Nov. 2, 2017

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The exam will be conducted in class. **You should bring a calculator. Only the Texas Instruments TI-30X IIS scientific calculator is allowed.** A sheet of key equations will be provided.

The exam will consist of 3-4 questions about some of the following topics.

- 1) An understanding of how to solve the Boltzmann Transport Equation (with electric fields, concentration gradients, and magnetic fields).
- 2) An understanding of the Landauer Approach to electronic transport and an ability to apply it to problems.
- 3) Knowledge of how the Landauer Approach is used to describe heat transport by phonons.
- 4) An understanding of thermoelectric transport equations and the transport coefficients in them as well as an ability to apply the thermoelectric transport equations to problems.

The best way to study for this exam is to be familiar with the HW assignments from Weeks 6 – 9.