1. **Course number and name:** EE 3006 Fundamentals of Electrical Engineering Laboratory

2. **Credits and contact hours:** 1 cr.; 2 hours of laboratory per week

3. **Instructor or course coordinator’s name:** David Orser

4. **Textbook (title, author, publisher, and year):**
   Lab manual downloaded from class home page.

5. **Specific course information**
   a. **Brief description of the content of the course (catalog description):**
      Lab to accompany 3005.
   b. **Prerequisites or co-requisites:** Concurrent enrollment in EE 3005 is allowed but not required
   c. **Indicate whether a required, elective, or selected elective:** Required

6. **Specific goals for the course**
   a. **Specific outcomes of instruction:**
      1. Reinforce the learning objectives and course content in EE 3005.
      2. A familiarity with operation of basic lab equipment utilized to evaluate electrical components: dc power supplies, volt-ohm meters, ammeters, and oscilloscopes.
      3. The ability to construct and test basic circuits such as: resistive networks, RC networks, RC and RLC filters, rectifiers, and op-amp circuits.
      4. The ability to record and documents in a laboratory notebook in accordance with standard engineering practice.
   b. **Explicitly indicate which of the ABET student outcomes are addressed by the course:**
      In accordance with ABET accreditation criteria, all engineering programs must demonstrate that their students achieve certain outcomes. This list of outcomes may be found on the abet.org website. Of the outcomes listed in the ABET Criterion 3 (enumerated as (1) through (7)), this course teaches skills which help the student achieve the following outcomes: (1), (6)

7. **Brief list of topics to be covered**
   1. Introduction to equipment
   2. Resistive circuits
   3. RC transient circuits
   4. Introduction to filters
   5. Diodes, rectifiers, and bridges
   6. Op-amps
   7. Op-amp based design problems