1. **Course number and name**  
   ENGR 106: Introduction to Engineering Laboratory

2. **Credits and contact hours**  
   1 credit hour; One 2 hours 50 minutes lab session / week

3. **Instructor’s or course coordinator’s name**  
   Instructor: Nik Faretto  
   Course coordinator: Amir Tabrizi, Lecturer and Computer Lab Manager

4. **Text book, title, author, and year**  
   
   a. other supplemental materials  
      Microsoft Equation Editor, Microsoft, 1991.  
      Rudra Pratap, Getting Started With MATLAB 2005, A quick introduction for Scientists and Engineers, 1999

5. **Specific course information**  
   a. **brief description of the content of the course (catalog description)**  
      Project based laboratory. Basic measuring tools. Introduction to MatLab, spreadsheet, and word processing software. Recording, importing, and plotting various data to incorporate into engineering reports. Developing hands-on experience with basic software tools.

   b. **prerequisites or co-requisites**  
      ENGR 100 concurrently

   c. **indicate whether a required, elective, or selected elective course in the program**  
      Required for Civil and Electrical Engineering

6. **Specific goals for the course**  
   a. **specific outcomes of instruction, ex. The student will be able to explain the significance of current research about a particular topic.**  
      - To familiarize students with basic skills to conduct engineering experiments.
      - To teach the elementary use of engineering problem solver programs including word processing, spreadsheet, mathematics solver, and others.
      - To develop written and oral communication skills.

   b. **explicitly indicate which of the student outcomes listed in Criterion 3 or any other outcomes are addressed by the course.**  
      Course addresses ABET Student Outcome(s): a, b, k, g
7. Brief list of topics to be covered
   • Basic Laboratory Experimental Tools
   • Advanced Laboratory Experimental Tools
   • Fundamentals of Microsoft Office
   • Fundamentals of Lab Report Writing
   • Presentation Skills