

Template for ABET course syllabi (new format)

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*

(Optional) Concepts in Engineering, 2<sup>nd</sup> Edition, McGraw Hill, 2008 (ISBN 978-0-07-319162-1)

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

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### 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