San Francisco State University  
School of Engineering  

Course Outline for ENGR 100 Introduction to Engineering

Bulletin Description:  
ENGR 100: Introduction to Engineering (1 units)  
Prerequisite: High school algebra and trigonometry

Description of the major engineering fields and their subfields. Day to day activities of engineers.  
Engineering professionalism, ethics, lifelong learning, and career planning. Survival skills. Safety issues and  
School of Engineering policies.

Instructor: Terry Mancilla, M.Sc Engineering  
tem@sfsu.edu

Textbooks:  

References:  

Coordinator:  
Dr. Shy-Shenq Liou, School of Engineering, San Francisco State University

Course Objectives:*  
1. Students understand the benefits and consequences of engineering solutions to societal and global  
problems. [C.1]  
2. To develop written and oral communication skills.

Topics:  
1. Introduction to Civil, Mechanical and Electrical Engineering  
2. Engineering Professionalism and Success  
3. Description of Major Engineering Fields  
4. Engineering Ethics, Global and Societal Issues  
5. Engineering Societies  
6. Writing Communication Skills  
7. Oral Communication Skills

Professional Component:  
Engineering Sciences ........... 0%  
Engineering Design ........... 0%

Evaluation:  
Attendance………………………………………………… 40%  
Assignments and Quizzes……………………………… 40%  
Report and Presentation ……………………………… 20%
Performance Criteria:

Objective 1
1.1 The student will demonstrate a knowledge of various engineering profession. [1, 2]
1.2 The student will demonstrate a knowledge of professional ethics. [1, 2]

Objective 2
2.1 The student will demonstrate a knowledge of presentation software. [1, 2]

Objective 3
4.1 The student will demonstrate knowledge of organizing engineering reports and technical memos. [3]
4.2 The student will demonstrate knowledge of presenting engineering subjects orally using presentation software. [4]

* Numbers in brackets refer to evaluation methods used to assess student performance.

ENGR 100 Introductions to Engineering

Instructor: Larry Klingenberg
Office: SCI 153
Office Hours: F 9:30-11:30 or by appointment
Email: larryk@sfsu.edu
Class Location: SCI 101 Class Schedule: Friday 1:10-2:00 p.m.

Notes on Evaluation:
* There will be no make up exam and no incomplete grades without a verified excuse.

* Homework will be assigned on a day of class and shall be submitted on day of class the following week.
No late homework will be accepted.

* A project will be assigned during the semester and presented as final exam by student.

Notes on Prerequisites:

High school geometry and trigonometry are required.

Grading Policy:
A from 100 to 92        A- from 91 to 90        B+ from 89 to 86        B from 85 to 83
B- from 82 to 80        C+ from 79 to 76        C from 75 to 73        C- from 72 to 70
D+ from 69 to 66        D from 65 to 63         D- from 62 to 60        F below 60

Relationship to Other Courses:
This is a first engineering course for the most engineering students. The lectures will be in two different categories: (1) understanding and preparation for the engineering profession and 2) develop communication skills.
The professional orientation acquired in ENGR 100 will be used in many of the engineering courses which follow.