Course Outline for ENGR 290: Computer Application in Engineering Communications

Elective
Mechanical Engineering

Bulletin Description
ENGR 290 Computer Application in Engineering Communication (1 units)
Prerequisites: sophomore standing
Importance of oral and written communication in engineering practice, different types of engineering reports, effective methods for oral presentation and application of current computer software for written and oral communication.

Textbook
None, but class notes will be handed out.

References
• Microsoft Office reference books on Word, Excel, and Powerpoint

Coordinator
Ahmad Ganji, Professor of Mechanical Engineering

Prerequisites by Topic
1. Computer literacy
2. Internet literacy

Course Objectives
1. Develop student’s ability to present a good engineering written report. [A.5]
2. Develop student’s ability to make a good engineering presentation. [A.5]
3. Enhance student’s ability to use MS Office and Internet tools in report writing and presentation. [A.5]

1 Indexes in brackets refer to “Objectives and Outcomes” for the School of Engineering.
Topics
1. Why engineers need to be good communicators.
2. Various forms of engineering reports.
3. What is needed for an engineering report.
4. How to develop a good engineering report.
5. Presentation of figures, graphs, and charts in engineering report.
6. Requirements for an oral presentation.
7. What is needed for an oral presentation of engineering work.
9. How to develop an oral presentation.
10. What to avoid in an oral presentation
12. Using MS Word, Excel in developing oral presentation
13. Use internet tools in oral presentation.

Professional Component
Engineering Sciences  0%
Engineering Design  0%

Evaluation
1. Homework
2. Written report
3. Oral Presentation

Performance Criteria²
Objective 1  Develop student’s ability to write good engineering reports.
  1.1  Student understands what is needed for a good engineering report. [1, 2]
  1.2  Student knows how to incorporate figures, graphs, and charts in engineering reports. [1, 2]
  1.3  Student can produce a good written engineering report. [1, 2]

Objective 2  Develop student’s ability to make a good oral engineering presentation.
  2.1  Student knows what is needed in engineering oral presentation. [1, 3]
  2.2  Student knows what to avoid in oral presentation. [1, 3]
  2.3  Student can make a good oral presentation. [1, 3]

Objective 3  Develop student’s ability to use MS Office and internet tools in engineering report and oral presentation.
  3.1  Student can use MS Office and internet tools in engineering report and oral presentation. [1, 2, 3]
  3.2  Student can use MS Office and internet tools in oral presentation. [1, 3]

Spring Semester, 2005

² Numbers in brackets refer to evaluation method used to assess student performance.
Instructor: E. Worrell
Office: SCI 168A

Class/Laboratory Schedule
One 2-hour-45-minute lecture session/week for 5 weeks

Prepared by
S. S. Liou, Spring, 2005