**DEPARTMENT OF INDUSTRIAL ENGINEERING**
**COURSE SYLLABUS**

**IE 200: Technical Communication Skills**

| COURSE TITLE | ENGLISH CODE/NO | ARABIC CODE/NO. | CREDITS | | | |
|---|---|---|---|---|---|---|
| | | | Th. | Pr. | Tr. | Total |
| **Technical Communication Skills** | IE 200 | هـ ص ٢٠٠ | | 10 | | 2 |
| ***Pre-requisites:*** | ELI 204 | | | | | |
| ***Course Role in Curriculum*** *(Required/Elective):* | Required Course | | | | | |
| ***Catalogue Description:*** Communication skills: art of listening, tools of in-depth reading, information gathering, analyzing, and criticizing; electronic means of communication. Writing skills: writing strategies, general versus technical writing, technical report writing. Presentation skills: use of spoken English, professional computer-based oral presentations. Project-based course work on technical communication. | | | | | | |

***Textbooks*:**
(Author, Title, Pub., year)
TLSU Team (2012), Face to Face with Basic Research & Communication: A Process & Project-Based Course.

***Supplemental Materials:***
1. Markel, Mike (2006), Technical Communication. (Teacher Reference).
2. Woolever (2002), Writing for Technical Professions. (Teacher Reference).
3. Svobodva et al. (2000), Writing in English: A Practical Handbook for Scientific and Technical Writer. (Teacher Reference).

***Course Learning Outcomes:***

By the completion of the course the students should be able to:

1. Describe the course design, rules and regulations
2. Identify elements of report writing and research components
3. Write a research proposal dealing with one contemporary issue
4. Write down a clear and concise introduction that defines the problem and forecasts the work to be carried out.
5. Communicate ideas orally while keeping the audience engaged
6. Access information from a variety of sources and critically assess their quality, validity and accuracy
7. Analyze and present data in a meaningful way
8. Interpret data
9. Use reliable and credible citations to support the credibility and authenticity of the information presented.
10. Demonstrate knowledge of terminology and research process and ability to reflect upon the learning experience
11. Demonstrate integrity, punctuality, enthusiasm and active class participation.

| ***Topics to be Covered:*** | | ***Duration in Weeks*** |
|---|---|---|
| 1. | Orientation | 1 |
| 2. | Introduction to research and report writing | 1 |
| 3. | Research proposal | 1 |
| 4. | Writing technical Introduction | 1 |
| 5. | Oral presentation skills | 1 |
| 6. | Data Collection Methods | 2 |
| 7. | Data Analysis | 2 |
| 8. | Discussions and Conclusions | 2 |
| 9. | Referencing and citations | 1 |
| 10 | Reflection upon learning | 1 |
| 11. | Professional behavior | 1 |

***Student Outcomes addressed by the course:*** (Put a ✓ sign)

| | | |
|---|---|---|
| (a) | an ability to apply knowledge of mathematics, science, and engineering | |
| (b) | an ability to design and conduct experiments, as well as to analyze and interpret data | |
| (c) | an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability | |
| (d) | an ability to function on multidisciplinary teams | |
| (e) | an ability to identify, formulate, and solve engineering problems | |
| (f) | an understanding of professional and ethical responsibility | ✓ |
| (g) | an ability to communicate effectively | ✓ |
| (h) | the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context | ✓ |
| (i) | a recognition of the need for, and an ability to engage in life-long learning | ✓ |
| (j) | a knowledge of contemporary issues | ✓ |
| (k) | an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice. | ✓ |

***Key Student Outcomes assessed in the course***: (g) (i) and (j)

***Instructor or course coordinator:*** Dr. Mohammad Chaudry
***Last updated:*** May 2014