

Department of Chemical Engineering			
Principles of Scientific & Technical Writing Research (64300)			
Total Credits		1	
Faculty compulsory			
Prerequisites		P1 : English Language II (10322)	
Course Contents			
<p>This course is intended to be a general compulsory course for the students in the engineering education programs. This course in its broad perspective introduces the key concepts related to scientific research and technical writing within an engineering framework. The course covers the chief definitions of scientific research and its types, approaches, and ethics, elaborates the research methodologies, illustrates the importance of research along with its generic outcomes, and highlights the role of the scientific-research centers in this regard with emphasis on An-Najah National University in specific and worldwide in general. Professional methods of successful technical writing and its importance are highlighted. The fundamental communication means of research outcomes are manifested including specialized journals, presentations, scientific meetings, conferences, and workshops.</p>			
Intended Learning Outcomes (ILO's)		Student Outcomes (SO's)	Contribution
1	Demonstrate an understanding the importance of scientific research and the role of professional technical writing	E	50 %
2	Perform subject searches in specialized scientific databases and online resources And Demonstrate the ability to use techniques, skills for professional engineering research	K	25 %
3	Demonstrate an ability to communicate effectively	G	15 %
4	Demonstrate the ability of an understanding of professional and ethical responsibility.	F	10 %
Textbook and/ or References			
The class notes are the main source of information for this course and can be downloaded from the following website: OCC(Open Course Container)			
Assessment Criteria		Percent (%)	
Reports		30 %	
Presentation		20 %	
Final Exam		50 %	
Course Plan			
Week	Topic		
1_2	Scientific research What is the scientific research? Why do we conduct scientific research? Who conducts scientific research? Examples on scientific research What are the outcomes of scientific research? Which countries and universities are leading in scientific research? Where is the position of Palestine researchers? Fundamental Principles of Scientific Research		
3_4	Effective Use of Web Search How to search for your research information		
9-5	Technical Writing (Report and Paper) Using Microsoft Office 2007 What is the technical writing? What do we pay attention to technical writing What is the importance of technical writing? Examples of poor, good and outstanding technical writing B.Sc. research organization Elements of a scientific research paper and how to write such a paper Assignment [1] : Write Technical Report for specified problem (30 Marks)		
10_1	Successful oral presentations for engineers		

1	
12_1 5	Assignment [2] : Presentations for specified topics (20 Marks)
16	Final Exam