

## 21. Course Specification of Technical Report Writing

	I. Course Identification and General Information:							
1.	Course Title:	Techr	nical Repor	t Writing				
2.	Course Code & Number:	BR11	2					
3.	Credit hours:	Th. Tu. Pr. Tr.				Total 2		
4.	Study level/ semester at which this course is offered:	Second Year - Second Semester						
5.	Pre –requisite (if any):	English Language 1(UR002) English Language 2(UR005)						
6.	Co –requisite (if any):	None						
7.	Program (s) in which the course is offered:	Electrical Engineering						
8.	Language of teaching the course:	English						
9.	Location of teaching the course:	Class						
10.	Prepared By:	Prof. Dr. Eng. Omar H. Al-Sakaf						
11.	Date of Approval							

## **II.** Course Description:

This course aims to teach students the principles of technical communication for their academic and professional needs, focusing on essential written and oral skills for presenting technical information effectively. The course covers three important aspects of technical communication; basic principles, which include the analysis of context, purpose and audience, fundamentals of technical report writing and key aspects of effective technical presentations.

Prepared by

Head of Department Asst. Prof. Dr. Adel Ahmed Al-Shakiri Quality Assurance Unit Assoc. Prof. Dr. Mohammad Algorafi Dean of the Faculty Prof. Dr. Mohammed AL-Bukhaiti Academic Development Center & Quality Assurance Assoc. Prof. Dr. Huda Al-Emad









]	III. Course Intended learning outcomes (CILOs) of the course	Referenced PILOs
a1	Define technical report design methodologies and be able to use them.	A1, A2, A3,
a2	Recognize professional and ethical responsibilities related to writing technical reports.	A4
<b>b1</b>	Analyze data and reflect this process and its results in the form of appropriate technical report.	D1 D2 D2 D4
<b>b2</b>	Select the most appropriate methods, equipment and tools for writing and presenting good technical reports.	B1, B2, B3, B4
c1	Achieve proficiency in writing technical reports.	
c2	Use professionally diverse methods of effective communication with the engineering community and with society at large.	C1, C2, C3, C4
d1	Recognize the need for, and have the ability to engage in independent, life-long learning.	D1, D2, D3, D4, D5
d2	Function effectively as an individual and as a member of a team.	D4, D3

(A) Alignment Course Intended Learning Outcomes of Knowledge and Understanding to Teaching Strategies and Assessment Strategies:					
Course Intended Learning Outcomes Teaching strategies Assessment Strategies					
a1 Define technical report design methodologies and be able to use them.	Lectures, Demonstrations,	Assignments/Mini group projects,			

Prepared by Head of Department

Asst. Prof. Dr. Adel Ahmed Al-Shakiri

Quality Assurance Unit Assoc. Prof. Dr. Mohammad Algorafi

Dean of the Faculty Prof. Dr. Mohammed AL-Bukhaiti

Academic Development Center & Quality Assurance Assoc. Prof. Dr. Huda Al-Emad



a2	Recognize prof	fessional a	and	ethical	Interactive class	Individual and group
	responsibilities	related	to	writing	discussion.	presentations.
techni	cal reports.					

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	(B) Alignment Course Intended Learning Outcomes of Intellectual Skills to Teaching Strategies and Assessment Strategies:					
С	ourse Intended Learning Outcomes	Teaching strategies	Assessment Strategies			
b1 and the	Analyze, interpret and evaluate data reflect this process and its results in form of appropriate technical report.	Lectures,	Assignments/Mini			
b2 writin		Demonstrations, Interactive class discussion.	group projects, Individual and group presentations.			

(C) Alignment Course Intended Learning Outcomes of Professional and Practical Skills to Teaching Strategies and Assessment Strategies:				
Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies		
c1 Achieve proficiency in writing technical reports.	Lectures,	Assignments/Mini		
c2 Use professionally diverse methods of effective communication with the engineering community and with society at large.	Demonstrations, Interactive class discussion.	group projects, Individual and group presentations.		

(D) Alignment Course Intended Learning Outcomes of Transferable Skills to Teaching Strategies and Assessment Strategies:			
Course Intended Learning (	Outcomes	Teaching strategies	Assessment Strategies

Head of Department Prepared by Asst. Prof. Dr. Adel

Quality Assurance Unit Assoc. Prof. Dr. Ahmed Al-Shakiri Mohammad Algorafi

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d1	Recognize the need for, and have the ability to engage in independent, lifelong learning.	Lectures, Demonstrations, Interactive class	Assignments/Mini group projects, Individual and group
d2 and	Function effectively as an individual as a member of a team.	discussion.	presentations.

IV.	Course	<b>Content:</b>

## A – Theoretical Aspects:

Order	Units/Topics List	Learning Outcomes	Sub Topics List	Number of Weeks	Contact Hours
1.	Technical Report Writing Skills within the General Context of Communication Skills.	a1, a2, b1, b2	<ul> <li>Overview and relevance of communication skills.</li> <li>The concept of Soft Skills.</li> <li>Report writing processes in engineering study and engineering profession.</li> </ul>	2	4
2.	Characteristics of Good Technical Writing.	a1, a2, b1	<ul> <li>Definition and purpose of technical writing.</li> <li>Values: standards to be followed.</li> <li>Originality and plagiarism.</li> </ul>	1	2
3.	Basic Report Structure	a1, a2b2, d2	<ul> <li>Title page.</li> <li>Summary.</li> <li>Table of contents.</li> <li>Introduction.</li> <li>Body of the report.</li> </ul>	3	6

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4.	Document Design.	b1, b2, c1, c2, d1, d2	<ul> <li>Conclusions and recommendations.</li> <li>References and appendices.</li> <li>Qualities of well-designed documents.</li> <li>Incorporating graphics into documents.</li> <li>Visuals and persuasion.</li> </ul>	2	4
5.	Effective Collaboration.	b1, b2, , d1, d2	<ul> <li>Report layout / formatting.</li> <li>Writing collaboratively.</li> <li>Using electronic media in collaboration.</li> <li>Intercultural communication.</li> <li>Case study: BSc.         Graduation Projects         (Library of the Faculty of Engineering/Sample projects from all departments).</li> </ul>	3	6
6.	Oral Presentations/ Speaking Skills.	a1, a2, b1, b2, c1, c2, d1, d2	<ul> <li>Elements of effective presentations.</li> <li>Non-verbal communication and body language.</li> <li>Oral expression in specific contexts: group presentations, participation in debates.</li> </ul>	3	6

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	<ul> <li>Organization of the oral presentation and solving unforeseen situations.</li> <li>Oral presentation of student research projects.</li> </ul>		
Number of Weeks /and l	Inits Per Semester	14	28

## V. Teaching Strategies of the Course:

- Lectures.
- Demonstrations.
- Interactive class discussion.
- Tutorials.

V	VI. Assignments:				
No	Assignments	Aligned CILOs(symbols)	Week Due	Mark	
1.	Homework.	b1, b2, d1, d2	2,6,10	5	
2.	Technical report writing assignments.	b1,b2,c1,c2	3,5,11	5	
3.	Individual and group presentations.	b1,b2,d1,d2	9,13	5	
	Total			15	

VII. Schedule of Assessment Tasks for Students During the Semester:					
No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes

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1.	Assignments	2,3, ,5,6,9,10,11,13	15	15%	b1, b2, d1, d2
2.	Mid-Term Exam	7	15	15%	a1,a2,b1,b2
3.	Final Exam	16	70	70%	a1,a2,b1,b2
Total		100	100%		

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### **VIII. Learning Resources:**

#### 1- Required Textbook

- 1. Daniel G. Riordan and Steven E. Pauley, Technical Report Writing Today, 10<sup>th</sup> Edition, 2014.
- 2. Laplante & Phillip A., Technical Writing: a practical guide for engineering, scientists, and nontechnical professionals, 2019.

#### 2- Essential References.

1. Gerald J. Alred, Charles T. Brusaw, Walter E. Oliu, Handbook of Technical Writing, 10<sup>th</sup> Edition, 2012.

#### 3- Electronic Materials and Web Sites etc.

- 1. Course Power Point.
- 2. Video clips.
- 3. Links to information resources.

### IX. Course Policies:

#### • Class Attendance

1. A student should attend not less than 75 % of total hours of the course; otherwise he will not be able to take the exam and will be considered as exam failure. If the student is absent due to illness, he/she should bring an approved statement from university Clinic.

#### Tardy

2. For being late in attending the class, the student will be initially notified. If he/she repeated lateness in attending class he will be considered as absent.

#### • Exam Attendance/Punctuality

A student should attend the exam on time. He is permitted to attend an exam half an hour from exam beginning, after that he/she will not be permitted to take the exam and he/she will be considered as absent in exam.

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#### Assignments and Projects

**4.** Assignments are given to the students after each chapter; students have to submit all assignments for checking on time.

#### • Cheating

5. For cheating in exam, a student will be considered as failure. In case the cheating is repeated three times during his/her study, the student will be dismissed from the Faculty.

### Plagiarism

Plagiarism is the attending of a student the exam of a course instead of another student. If the examination committee proved a plagiarism of a student, he will be dismissed from the Faculty. The final dismissal of the student from the Faculty should be confirmed by the Student Council Affairs of the university.

#### - Other policies

- Mobile phones are not allowed to use during a class lecture. It must be closed, otherwise the student will be asked to leave the lecture room.
- Mobile phones are not allowed in class during the examination.
  - Lecture notes and assignments may be given directly to students using soft and/or hard copy.

Reviewed	Vice Dean for Academic Affairs and Post Graduate Studies: Asst. Prof. Dr. Tarek			
By	A. Barakat			
	President of Quality Assurance Unit: Assoc. Prof. Dr. Mohammed Algorafi			
	Name of Reviewer from the Department: Assoc. Prof. Dr. Radwan Al bouthigy			
	Deputy Rector for Academic Affairs Asst. Prof. Dr. Ibrahim AlMutaa			
	Assoc. Prof. Dr. Ahmed Mujahed			
	Asst. Prof. Dr. Munasar Alsubri			

Prepared by

7.

Head of Department Asst. Prof. Dr. Adel Ahmed Al-Shakiri Quality Assurance Unit Assoc. Prof. Dr. Mohammad Algorafi Dean of the Faculty Prof. Dr. Mohammed AL-Bukhaiti Academic Development Center & Quality Assurance Assoc. Prof. Dr. Huda Al-Emad



## 21. Course Plan of Technical Report Writing

Information about Faculty Member Responsible for the Course:							
Name of Faculty Member	Prof. Dr. Eng. Omar H. Al- Sakaf	Office Hours					
Location& Telephone No.	Faculty of Engineering Mobile: 733772328/773332328	SAT	SUN	MON	TUE	WED	THU
E-mail	oalsakaf@gmail.com oalsakaf@yahoo.com		08:00 - 12:00				

II. Course Identification and General Information:						
1.	Course Title:	Technical Report Writing				
2.	Course Number & Code:	BR1	12			
			C	C.H		Total
3.	Credit hours:	Th.	Tu.	Pr.	Tr.	Total
			ı	1	-	2
4.	Study level/year at which this course is offered:	Second Year - First Semester				
5.	Pre –requisite:	English Language 1(UR002) English Language 2(UR005)				
6.	Co –requisite (if any):	None				
7.	Program (s) in which the course is offered	Electrical Engineering				
8.	Language of teaching the course:	English				
9.	System of Study:	Regular				
10.	Mode of delivery:	Semester				
11.	Location of teaching the course:	Clas	S			

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### **III.** Course Description:

This course aims to teach students the principles of technical communication for their academic and professional needs, focusing on essential written and oral skills for presenting technical information effectively. The course covers three important aspects of technical communication; basic principles, which include the analysis of context, purpose and audience, fundamentals of technical report writing and key aspects of effective technical presentations.

### IV. Intended Learning Outcomes (ILOs) of the Course:

- 1. Define technical report design methodologies and be able to use them.
- 2. Recognize professional and ethical responsibilities related to writing technical reports.
- **3.** Analyze data and reflect this process and its results in the form of appropriate technical report.
- **4.** Select the most appropriate methods, equipment and tools for writing and presenting good technical reports.
- **5.** Achieve proficiency in writing technical reports.
- **6.** Use professionally diverse methods of effective communication with the engineering community and with society at large.
- **7.** Recognize the need for, and have the ability to engage in independent, life-long learning.
- **8.** Function effectively as an individual and as a member of a team.

V.	V. Course Contents:				
A – Theoretical Aspects:					
Order	Topics List	Sub Topics List	Week Due	Contact Hours	
1.	Technical Report Writing	Overview and relevance of communication skills.	1 <sup>st</sup> ,2 <sup>nd</sup>	4	

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	Skills within the General Context of Communication Skills.	<ul> <li>The concept of Soft Skills.</li> <li>Report writing processes in engineering study and engineering profession.</li> </ul>		
1.	Characteristics of Good Technical Writing.	<ul> <li>Definition and purpose of technical writing.</li> <li>Values: standards to be followed.</li> <li>Originality and plagiarism.</li> </ul>	3 <sup>rd</sup>	2
2.	Basic Report Structure	<ul> <li>Title page.</li> <li>Summary.</li> <li>Table of contents.</li> <li>Introduction.</li> <li>Body of the report.</li> <li>Conclusions and recommendations.</li> <li>References and appendices.</li> </ul>	4 <sup>th</sup> ,5 <sup>th</sup> ,6 <sup>th</sup>	6
3.	Midterm exam		7 <sup>th</sup>	2
4.	Document Design.	<ul> <li>Qualities of well-designed documents.</li> <li>Incorporating graphics into documents.</li> <li>Visuals and persuasion.</li> <li>Report layout / formatting.</li> </ul>	8 <sup>th</sup> ,9 <sup>th</sup>	4
5.	Effective Collaboration.	<ul> <li>Writing collaboratively.</li> <li>Using electronic media in collaboration.</li> <li>Intercultural communication.</li> <li>Case study: BSc. Graduation Projects (Library of the Faculty of Engineering/Sample projects from all departments).</li> </ul>	10 <sup>th</sup> ,11 <sup>th</sup> ,12 <sup>th</sup>	6

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6.	Oral Presentations/ Speaking Skills.	<ul> <li>Elements of effective presentations.</li> <li>Non-verbal communication and body language.</li> <li>Oral expression in specific contexts: group presentations, participation in debates.</li> <li>Organization of the oral presentation and solving unforeseen situations.</li> <li>Oral presentation of student research projects.</li> </ul>	13 <sup>th</sup> ,14 <sup>th</sup> ,15 <sup>th</sup>	6
7.	Final Exam		16 <sup>th</sup>	2
Number of Weeks and Units Per Semester		16	32	

## VI. Teaching Strategies of the Course:

- Lectures.
- Interactive class discussion.
- Demonstration Technical Video Clips.
- Tutorials.

7	VII. Assignments:				
No.	Assignments	Aligned CILOs(symbols)	Week Due	Mark	
1.	Homework	b1, b2, d1, d2	2,6,10	5	
2.	Technical report writing assignments.	b1,b2,c1,c2	3,5,11	5	
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	Total			15	

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### VIII. Schedule of Assessment Tasks for Students During the **Semester:**

Assessment	Type of Assessment Tasks	Week Due	Mark	Proportion of Final Assessment
1.	Assignments	2,3, ,5,6,9,10,11,13	15	15%
2.	Mid-Term Exam	7	15	15%
3.	Final Exam	16	70	70%
	Total	100	100%	

#### IX. **Learning Resources:**

### 1- Required Textbook(s)

- 1- Daniel G. Riordan and Steven E. Pauley, Technical Report Writing Today, 10<sup>th</sup> Edition, 2014.
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#### 3- Electronic Materials and Web Sites etc.

- 1. Course Power Point.
- 2. Video clips.
- 3. Links to information resources.

#### X. **Course Policies:**

#### **Class Attendance**

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	A student should attend not less than 75 % of total hours of the course; otherwise he will not be able to take the exam and will be considered as exam failure. If the student is absent due to illness, he/she should bring an approved statement from university Clinic.
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4.	• Assignments and Projects  Assignments are given to the students after each chapter; students have to submit all assignments for checking on time.
5.	• Cheating  For cheating in exam, a student will be considered as failure. In case the cheating is repeated three times during his/her study, the student will be dismissed from the Faculty.
6.	• Plagiarism  Plagiarism is the attending of a student the exam of a course instead of another student. If the examination committee proved a plagiarism of a student, he will be dismissed from the Faculty. The final dismissal of the student from the Faculty should be confirmed by the Student Council Affairs of the university.
7.	<ul> <li>Other policies</li> <li>Mobile phones are not allowed to use during a class lecture. It must be closed, otherwise the student will be asked to leave the lecture room.</li> <li>Mobile phones are not allowed in class during the examination.</li> </ul>

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Lecture notes and assignments may be given directly to students using soft and/or hard copy.

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