24. Course Specification of Technical Writing

I.	Course Identification and General Information:					
1.	Course Title:	Technical Writing.				
2.	Course Code & Number:	BR112.				
3.	Credit hours:	C.H				TOTAL CR. Hrs.
		Th.	Seminar/Tu	Pr	Tr.	
		2	-	-	-	2
4.	Study level/ semester at which this course is offered:	Second Year-Second Semester.				
5.	Pre –requisite (if any):	English Language - I and English Language – II.				
6.	Co –requisite (if any):	None.				
7.	Program (s) in which the course is offered:	Mechanical Engineering Program.				
8.	Language of teaching the course:	English Language.				
9.	Location of teaching the course:	Mechanical Engineering Department.				
10.	Prepared By:	Assoc. Prof. Dr. Abdul-Malik Momin.				
11.	Date of Approval					

II. Course Description:

The purpose of this course is to teach technical writing skills to a diverse group of students. It emphasizes writing that is focused on scientific and technical topics, that is clear and concise, and that is geared toward a targeted audience by the appropriate choice of format and technical writing style. It also focuses on technical communication, presentation of specialized information in an accessible way. The course topics focus on the basic grammatical structures and language functions needed for the study and communication in the field of Mechanical. It is intended to provide a solid formation in the English language skills as well as the study skills needed by the students in their specialist studies. It covers a wide range of Engineering subjects, common grammatical structures, specialist vocabulary and basic language functions. Technical Writing prepares students to be effective communicators and effective writers in their current and future professions.

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III. Course Intended learning outcomes (CILOs) of the course		Referenced PILOs
a1	Recognize general principles of technical writing techniques using basic grammar.	A2
a2	Express the main ideas related to the topics of writing with effect vocabulary.	A4
b1	Examine the effect of technical writing in the management process using best essays.	B3
c1	Apply different techniques for writing a report in the area of Mechanical Engineering with special terminologies.	C1
c2	Perform different feasibility studies taking into account the main purpose required with the support of technical terms.	C4
d1	Assess to time factor for completion of different processes required in this course.	D4
d2	Cooperate effectively within the team in presenting the technical reports.	D5

(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- Recognize general principles of technical writing techniques using basic grammar. **a2-** Express the main ideas related to the topics of writing with effect vocabulary.	• Active Lectures. • Interactive Class Discussions.	• Presentations. • Short Essay.

(B) Alignment Course Intended Learning Outcomes of Intellectual Skills to Teaching Strategies and Assessment Strategies:

Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
b1- Examine the effect of technical writing in the management process using best essays.	• Active Lectures. • Seminars.	• Examination. • Homework. • Project Reports.

© **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- Apply different techniques for writing a report in the area of Mechanical Engineering with special terminologies**.** **c2-** Perform different feasibility studies taking into account the main purpose required with the support of technical terms.	• Active Lectures • Individual/Team Work. Projects	• Individual and Group Project Reports.

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

Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
d1- Assess to time factor for completion of different processes required in this course. **d2-** Cooperate effectively within the team in presenting the technical reports.	• Individual/Team Work. Projects • Directed Self –Study. • Seminars.	• Individual and Group Projects Reports. • Presentations.

IV. Course Content:

A – Theoretical Aspect:

Order	Units/Topics List	Learning Outcomes	Sub -Topics List	Number of Weeks	Contact Hours
1.	General Revision of Technology 1 and Technology 2.	a1, a2	• Review of Main and Detailed Structure of Technology 1 and Technology 2.	2	4

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2.	Orientation to Grammatical Approaches.	a1,a2,b1.	• Description of Mechanism and Processes. • Sentence Structure. • Punctuation Rules.	1	2
3.	Main Tenses.	a1, a2, b1.	• Applications of Main Tenses in Sentences. • Approach to Grammar for Technical Writing Style and Paper Revision.	1	2
4.	Technical Knowledge and Applications of Terminologies.	a1, a2, b1, c1, c2, d1, d2.	• Terminologies Applied in Mechanical Engineering. • Editing of Technical Reports.	1	2
5.	Technical Report Structure.	a1, a2, b1, c1, c2, d1, d2.	• Approach to Scientific and Technical Literature. • Basic Knowledge of Scientific and Technical Fields. • Short Technical Documents. • Development of Research Skills. • Types of Technical Writing Audience Analysis.	2	4
6.	Mid-Term Exam.	a1, a2, b1, c1, c2.	• The First Five Chapters.	1	2
7.	Reports Design.	a1, a2, b1, c1, c2, d1, d2.	• Formatting Techniques. • Collecting Notes, Writing Outlines and Writing Rough Drafts.	2	4

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Asst. Prof. Dr. Adel Ahmed Al-Shakiri	Assoc. Prof. Dr. Mohammad Algorafi	Prof. Dr. Mohammed AL-Bukhaiti	Assoc. Prof. Dr. Huda Al-Emad	Prof. Dr. Al-Qassim Mohammed Abbas

			• Final Production of a Primary Report.		
8.	Special Reports.	a1, a2, b1, c1, c2, d1, d2.	• Page Design. • Headings and Tables. • Selection of Fonts. • Graphic Aids in Technical Reports.	2	4
9.	A Writing Process.	a1, a2, b1, c1, c2, d1, d2.	• Mind Mapping Creativity Techniques. • Applications of Training. • Job Application Procedure. • Design of a Professional Curriculum Vitae.	1	2
10.	Writing a Specified Technical Report in a Laboratory.	a1, a2, b1, c1, c2, d1, d2.	• Writing an Abstract. • Writing the Main Core of the Technical Report. • List of References.	1	2
11.	Technical Documents.	a1, a2, b1, c1, c2, d1, d2.	• Report regarding the Maintenance and Failures in the Factory. • Main Obstacles in the Factory. • Raising the Main Proposal to the Director.	1	2
12.	Final Exam		• All the Chapters.	1	2
Number of Weeks /and Units Per Semester				**16**	**32**

V.   Teaching Strategies of the Course:

- Active Lectures.
- Interactive Class Discussions.
- Seminars.
- Individual/Team Work Projects.

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- Directed Self –Study

VI.   Assignments:

No	Assignments	Aligned CILOs(symbols)	Week Due	Mark
1.	Group Activities.	a1, a2, b1, c1, c2, d1, d2.	Every Week	10
	Total			**10**

VII. Schedule of Assessment Tasks for Students During the Semester:

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes
1.	Assignments.	Weekly	10	10 %	a1, a2, b1, c1, c2, d1, d2.
2.	Mid-Term Exam.	8 th	20	20 %	a1, a2, b1, c1, c2.
3.	Course File	15 th	10	10 %	a1, a2, b1, c1, c2, d1, d2.
4.	Final Exam.	16 th	60	60 %	a1, a2, b1, c1, c2.
	Total:		**100**	**100 %**	

VIII. Learning Resources:

- *Written in the following order: (Author - Year of publication – Title – Edition – Place of publication – Publisher).*

1- Required Textbook(s) (maximum two).

	1. Alice Oshima and Ann Hogue, (2006), "Writing Academic English", Fourth Edition. Longman Academic Writing Series.
	2. Eric H. Glendinning, Technology 1 and Technology 2, 2007, Oxford English for Careers New York, Oxford University Press.

2- Essential References.

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	1. Ibboston, Mark, (2009), "Professional English in Use (Engineering), Cambridge Unive Press. 2. Collins, Harpers, (1990), "Collins Cobuild English Grammar", Williams Collins Sons& Company, Ltd.
3- Electronic Materials and Web Sites *etc*.	
	1. www.techscribe.co.uk. 2. www.prc.dk. 3. En.wikipedia.org.

I. Course Policies:

1	**Class Attendance:** **-** The student should be attending not less than 75% of total contact hours of the subject, otherwise he will not able to take exam and be considerd as an exam failure. If the student is absent due to illness, he/she should bring an approved statement from university Clinic.
2	**Tardy:** - For lateness in attending the class, the student will be initially notified. If he repeates late in attending class he will be considered absent.
3	**Exam Attendance/Punctuality:** **-** The student should attend the exam on time. He is permitted to attend the exam half one hour from exam beginning, after that he/she will not be permitted to take exam and he/she is considered absent in the exam.
4	**Assignments & Projects:** - In general one assignment is given after each chapter of a course. The student should submit the assignment on time, mostly one week after giving the assignment
5	**Cheating:** **-** For cheating in exam, the student is considered as failure. In case the cheating is repeated three times during study the student will be disengaged from the Faculty
6	**Plagiarism:** Plagiarism is the attending of the student the exam of a course instead of other student. If the examination committee proved a plagiarism of a student, he will be disengaged from the Faculty. The final disengagement of the student from the Faculty should be confirmed from the Student Affair Council of the university.
7	**Other policies:** - The mobile phone is not allowable to be used during class lecture. It must be switched off, otherwise the student will be ordered to leave the lecture room. - The mobile phone is not allowed to be taken during the examination time.

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

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

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24. Course Plan of Technical Writing

I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member	Dr. Abdul-Malik Momin	Office Hours					
Location& Telephone No.	Mechanical Engineering Department- 777943334	**SAT**	**SUN**	**MON**	**TUE**	**WED**	**THU**
E-mail	dramalikmomin@yahoo.com						

II. Course Identification and General Information:

1.	Course Title:	Technical Writing.				
2.	Course Number & Code:	BR112.				
3.	Credit hours:	C.H				Total Cr. Hrs.
		Th.	Seminar/Tu	Pr	Tr.	
		2	-	-	-	2
4.	Study level/year at which this course is offered:	Second Year -Second Semester.				
5.	Pre –requisite (if any):	English Language - I and English Language - II.				
6.	Co –requisite (if any):	None.				
7.	Program (s) in which the course is offered	Mechanical Engineering Program.				
8.	Language of teaching the course:	English Language.				
9.	System of Study:	Semesters.				
10.	Mode of delivery:	Lectures.				
11.	Location of teaching the course:	Mechanical Engineering Department.				

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Quality Assurance Unit
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Dean of the Faculty
Prof. Dr. Mohammed AL-Bukhaiti

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

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III.	Course Description:

The purpose of this course is to teach technical writing skills to a diverse group of students. It emphasizes writing that is focused on scientific and technical topics, that is clear and concise, and that is geared toward a targeted audience by the appropriate choice of format and technical writing style. It also focuses on technical communication, presentation of specialized information in an accessible way. The course topics focus on the basic grammatical structures and language functions needed for the study and communication in the field of Mechanical. It is intended to provide a solid formation in the English language skills as well as the study skills needed by the students in their specialist studies. It covers a wide range of Engineering subjects, common grammatical structures, specialist vocabulary and basic language functions. Technical Writing prepares students to be effective communicators and effective writers in their current and future professions.

IV.	Course Intended learning outcomes (CILOs) of the course
1.	Recognize general principles of technical writing techniques using basic grammar.
2.	Express the main ideas related to the topics of writing with effect vocabulary.
3.	Examine the effect of technical writing in the management process using best essays.
4.	Apply different techniques for writing a report in the area of Mechanical Engineering with special terminologies.
5.	Perform different feasibility studies taking into account the main purpose required with the support of technical terms.
6.	Assess to time factor for completion of different processes required in this course.
7.	Cooperate effectively within the team in presenting the technical reports.

V.	Course Content:

- Distribution of Semester Weekly Plan Of course Topics/Items and Activities.

Order	Units/Topics List	Sub -Topics List	Number of Weeks	Contact Hours
1.	General Revision of Technology 1 and Technology 2.	• Review of Main and Detailed Structure of Technology 1 and Technology 2.	1st , 2nd	4

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2.	Orientation to Grammatical Approaches.	• Description of Mechanism and Processes. • Sentence Structure. • Punctuation Rules.	3rd	2
3.	Main Tenses.	• Applications of Main Tenses in Sentences. • Approach to Grammar for Technical Writing Style and Paper Revision.	4th	2
4.	Technical Knowledge and Applications of Terminologies.	• Terminologies Applied in Mechanical Engineering. • Editing of Technical Reports.	5th	2
5.	Technical Report Structure.	• Approach to Scientific and Technical Literature. • Basic Knowledge of Scientific and Technical Fields. • Short Technical Documents. • Development of Research Skills. • Types of Technical Writing Audience Analysis.	6th , 7th	4
6.	Mid-Term Exam.	• The First Five Chapters.	8th	2
7.	Reports Design.	• Formatting Techniques. • Collecting Notes, Writing Outlines and Writing Rough Drafts. • Final Production of a Primary Report.	9th , 10th	4
8.	Special Reports.	• Page Design. • Headings and Tables. • Selection of Fonts. • Graphic Aids in Technical Reports.	11th , 12th	4
9.	A Writing Process.	• Mind Mapping Creativity Techniques.	13th	2

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		• Applications of Training. • Job Application Procedure. • Design of a Professional Curriculum Vitae.		
10.	Writing a Specified Technical Report in a Laboratory.	• Writing an Abstract. • Writing the Main Core of the Technical Report. • List of References.	14th	2
11.	Technical Documents.	• Report regarding the Maintenance and Failures in the Factory. • Main Obstacles in the Factory. • Raising the Main Proposal to the Director.	15th	2
12.	Final Exam.	• All the Chapters.	16th	2
Number of Weeks /and Units Per Semester			**16**	**32**

VI.　Teaching strategies of the course:

- Active Lectures.
- Interactive Class Discussions.
- Seminars.
- Individual/Team Work Projects.
- Directed Self –Study

VII.　Assignments:

No	Assignments	Aligned CILOs(symbols)	Week Due	Mark
1.	Group Activities	a1, a2, b1, c1, c2, d1, d2.	Every Week	10
Total:				**10**

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

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment
1.	Assignments	Weekly	10	10 %

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	Rector of Sana'a University Prof. Dr. Al-Qassim Mohammed Abbas

2.	Mid-Term Exam.	8 th	20	20 %
3.	Course File.	15 th	10	10 %
4.	Final Exam.	16 th	60	60 %
Total:			**100**	**100%**

IX.   Learning Resources:

- *Written in the following order: (Author - Year of publication – Title – Edition – Place of publication – Publisher).*

1- Required Textbook(s) (maximum two).

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   a. Longman Academic Writing Series.
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2- Essential References.

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3	**Exam Attendance/Punctuality:**

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