



**University/Academy:** Arab Academy for Science, Technology & Maritime Transport  
**Faculty/Institute:** College of Engineering & Technology  
**Program:** B.Sc. Mechanical Engineering

Form no. (12): **Course Specification****1- Course Data**

Course Code: <b>LH 231</b>	Course Title: <b>Technical Report Writing</b>	Academic Year/Level: <b>2<sup>nd</sup> Year/ 3<sup>rd</sup> semester</b>	
Specialization: All Specializations	No. of Instructional Units <b>3Credits</b>	Lecture <b>2hrs.</b>	Tutorial <b>4hrs.</b>

**2- Course Aim**

This course is designed to help students to master professional technical writing by means of a systematic writing process: outlining, drafting, revising, and writing. The course primarily addresses keys topics of importance to students' academic and professional life, namely, writing effective memos, letters, reports, proposals, résumés, and descriptions. During the course, students engage in weekly hands-on assignments that capitalize on these multiple genres and their respective formats

**3- Intended Learning Outcomes**

<b>a. Knowledge and Understanding</b>	<p><b>Through knowledge and understanding, students will be acquire knowledge of:</b></p> <p>K1. Concepts and theories of mathematics and sciences, appropriate to the discipline.</p> <ul style="list-style-type: none"> <li>• identify Technical Report Writing as a genre.</li> <li>• identify the different types of technical reports.</li> <li>• identify the different structures of technical reports.</li> <li>• identify the stages of writing a technical report.</li> <li>• identify the definition and the basic types of process reports.</li> <li>• identify the structure of a process report.</li> <li>• identify the sections of a feasibility report.</li> <li>• identify the characteristics of a good summary.</li> <li>• recognize a general format for writing a technical report.</li> <li>• Recognize the different methods of writing proposals</li> </ul> <p>K10. Technical language and report writing</p> <ul style="list-style-type: none"> <li>• Present a draft about a given topic</li> <li>• Write effective letters and memos for a variety of academic/professional purposes.</li> <li>• Use visual aids and illustrations in the writing of effective reports and/or proposals. <ul style="list-style-type: none"> <li>• Using tables-line graphs-using bar graphs-pie charts-illustration</li> </ul> </li> <li>• describe the language used in technical report writing.</li> <li>• describe different types of illustrations in technical report writing.</li> <li>• Collecting information from people (interviewing-over viewing- surveying)</li> </ul>
<b>b. Intellectual Skills</b>	<p><b>Through intellectual skills, students will be able to:</b></p> <p>I14. Plan, conduct and write a report on a project or assignment.</p> <ul style="list-style-type: none"> <li>• evaluate different methods of organizing writing in technical reports.</li> <li>• evaluate the language used in technical reports.</li> <li>• Write an analytical report using a table or graph to explain a problem and a solution to you manager</li> <li>• define and classify technical terms.</li> <li>• evaluate the structure of different types of technical reports.</li> <li>• Use an appropriate format for writing a technical report.</li> <li>• evaluate the difference between acceptable and unacceptable paraphrases.</li> <li>• evaluate summaries of relevant texts.</li> <li>• Prepare for a research paper</li> </ul>

	<ul style="list-style-type: none"> <li>• Write an external proposal offering Internet service providing to the AAST</li> <li>• describe different types of visual aids in technical writing.</li> <li>• Apply ways of writing proposals</li> <li>• Collecting published information- develop research strategy- helpful sources-record your findings</li> </ul>
<b>c. Professional Skills</b>	<p><b>Through professional and practical skills, students will be able to:</b></p> <p>P11. Exchange knowledge with engineering community and industry.</p> <ul style="list-style-type: none"> <li>• Submitting, correcting, and discussing the final draft of the research paper</li> </ul> <p>P12. Prepare and present technical reports.</p> <ul style="list-style-type: none"> <li>• Punctuation-abbreviations-capitalization- numbers</li> <li>• Summarize relevant texts</li> <li>• Write a short report</li> <li>• Write a transmittal letter to the headquarters</li> <li>• Write the Conclusions and Recommendations sections of a Feasibility report</li> <li>• Planning a resume- Write the resume</li> <li>• Write a letter of application to a multinational company attaching your resume.</li> <li>• Finalize the outline for the formal report</li> <li>• Write 2/3 extended definitions of technical terms relevant to your major for non-expert readers in addition to an extended definition of an effective Website</li> <li>• Write an essay describing the mechanism of a gadget of your choice (e.g., iPhone, digital camera, etc. or any other one related to your major)</li> </ul>
<b>d. General Skills</b>	<p><b>Through general and transferable skills, students will be able to:</b></p> <p>G7. Search for information and engage in life-long self learning discipline.</p> <ul style="list-style-type: none"> <li>• Peer editing of the previous assignment</li> <li>• (Analyse the situation- Goals- audience- fields-assess your strength- needs of employers)</li> <li>• Give a well-structured draft on a technical topic</li> <li>• Give effective, well structured draft of mechanism description</li> </ul> <p>G9. Refer to relevant literature effectively</p> <ul style="list-style-type: none"> <li>• Write a one-paragraph summary of a 2/3 page article related to your major.</li> <li>• Write a memo on moving to a new headquarter opening a new branch in Egypt.</li> <li>• Write well-structured reports</li> <li>• Write well-structured Primary Research reports</li> <li>• Give effective, well- structured draft</li> <li>• Describe the process of operating the gadget you chose in the previous assignment</li> </ul>

**4- Course Content**

Week	Session (A) <b>Reports &amp; Proposals / Researching</b>	Session (B) <b>Business Correspondence</b>
<b>1</b>	Orientation & Review	Orientation & Review
<b>2</b>	<p><b>Chapter 8:Summarizing</b> (pp. 204-214) Definition of summaries-audience-planning- writing summaries-work sheet for summarizing. <b>Appendix: (pp551-557)</b> sentence construction- comma splices-run on sentences-sentence fragments-modifiers subject verb agreement <b>Assignment:</b> Write a one-paragraph summary of a 2/3 page article related to your major.</p>	<p><b>Chapter 12:Memorandums</b> (pp. 287-320) Elements of memo- memo headings- sample memo report <b>Appendix: (pp558-570)</b> Punctuation-abbreviations-capitalization- numbers <b>Assignment:</b> Write a memo on moving to a new headquarter opening a new branch in Egypt.</p>

3	<p><b><u>Chapter 12 Informal Reports (Elements/IMRD &amp; Outline Reports)</u></b> (pp. 291-316) <b>Peer editing of the previous assignment.</b> <b><u>Assignment:</u> Choose one</b></p> <ul style="list-style-type: none"> <li>• Write an IMRD report to give a result of a session in which you learned something about navigating the internet. (ex.2- p316)</li> <li>• Write an outline report to summarize a long report.</li> </ul>	<p><b><u>Chapter 19: Letters (Formats &amp; Elements/ Planning)</u></b> (pp.497-512) <b>Peer editing of the previous assignment.</b> <b><u>Assignment:</u></b> Write a letter to Cambridge University asking about the scholarships offered to overseas postgraduate students.</p>
4	<p><b><u>Chapter 12:Informal Reports (Analytical Reports)</u></b> <b>Peer editing of the previous assignment.</b> <b><u>Assignment:</u></b> Write an analytical report using a table or graph to explain a problem and a solution to you manager (ex.1-p.316)</p>	<p><b><u>Chapter 19: Letters (Transmittal letters)</u></b> <b>Peer editing of the previous assignment.</b> <b><u>Assignments:</u></b> Write a transmittal letter to the headquarters of your company introducing an attached report dealing with the various personnel problems faced in your Cairo branch.</p>
5	<p><b><u>Chapter 12:Informal Reports (Progress reports)</u></b> <b>Peer editing of the previous assignment.</b> <b><u>Assignment:</u></b> Write a learning (progress) report for the writing assignments you have just completed.</p>	<p><b><u>Chapter 19: Letters (General information letters)</u></b> <b>Peer editing of the previous assignment.</b> <b><u>Assignment:</u></b> Write a general information letter to your instructor to give him/her the background details of a report you will submit.</p>
6	<p><b><u>Chapter 7: Visual Aids</u></b> (pp.174-203) Using tables-line graphs-using bar graphs-pie charts-illustration <b>Peer editing of the previous assignment.</b> <b><u>Assignment:</u></b> Conduct a survey on one of the chosen topic. Submit the results of a survey you have conducted using the appropriate visual aids.</p>	<p><b><u>Chapter 20: Job application materials (Résumés)</u></b> (pp.513-547) (Analyse the situation- Goals- audience- fields-assess your strength- needs of employers) Planning a resume- Write the resume <b>Peer editing of the previous assignment.</b> <b><u>Assignment:</u></b> Write your own résumé.</p>
7	7 <sup>th</sup> week exam	7 <sup>th</sup> week exam
8	<p><b><u>Chapter 14: Formal Reports (Elements &amp; front material)</u></b> (pp.355-380) <b>Peer editing of the previous assignment.</b> <b><u>Assignment:</u></b> Write the introductory elements of a formal report on the technical problems of the wireless internet services.</p>	<p><b><u>Chapter 20: Job application materials (Letter of application)</u></b> (pp.525-534) <b>Peer editing of the previous assignment.</b> <b><u>Assignment:</u></b> Write a letter of application to a multinational company attaching your resume.</p>
9	<p><b><u>Chapter 14: Formal Reports (Body &amp; end material)</u></b> <b>Peer editing of the previous assignment.</b> <b><u>Assignment:</u></b> Write a full-length formal report on the technical problems of the wireless internet services.</p>	<p><b><u>Chapter 20: Job application materials (Follow-up letters)</u></b> <b>Peer editing of the previous assignment.</b> <b><u>Assignment:</u></b> Write a follow-up letter that comes after your interview with the HR head in the company you applied for.</p>
10	<p><b><u>Chapter 16: Proposals (External proposals)</u></b> (pp. 415-440) <b>Peer editing of the previous assignment.</b> <b><u>Assignment:</u></b> You are working in an internet servicing company. Write an external proposal offering Internet service providing the AAST</p>	<p><b><u>Chapter 9:Defining</u></b> (pp.215-227) <b>Peer editing of the previous assignment.</b> <b><u>Assignment:</u></b> Write 2/3 extended definitions of technical terms relevant to your major for non-expert readers in addition to an extended definition of an effective Website.</p>
11	<b><u>Drafts- 12<sup>th</sup> week exam</u></b>	<b><u>Drafts- 12<sup>th</sup> week exam</u></b>

	Draft writing on one of the suggested topics.	Draft writing on one of the suggested topics.
<b>12</b>	<b>12<sup>th</sup> week exam</b>	
<b>13</b>	<p><b>Chapter 16: Proposals (Internal proposals)</b> (pp. 415-440) <b>Peer editing of the previous assignment.</b> <b>Assignment:</b> Using visual aids and graphs, write an internal proposal on solving the limited number of rooms allocated to classes in Engineering building. <b>Chapter 5: Researching</b> (pp 112-136) <b>Assignment:</b> Write a plan to a research on one of the suggested topics on pp. 133-134</p>	<p><b>Chapter 10: Describing (Description of a mechanism)</b> (pp. 228-259) <b>Peer editing of the previous assignment.</b> <b>Assignment:</b> Write an essay describing the mechanism of a gadget of your choice (e.g., iPhone, digital camera, etc. or any other one related to your major).</p>
<b>14</b>	<p><b>Chapter 5: Researching (cont.)</b> Collecting information from people (interviewing-over viewing- surveying) Collecting published information-develop research strategy- helpful sources-record your findings <b>Peer editing of the previous assignment.</b> Submitting, correcting, and discussing the final draft of the research paper</p>	<p><b>Chapter 10: Describing (Description of a process)</b> <b>Peer editing of the previous assignment.</b> <b>Assignment:</b> Describe the process of operating the gadget you chose in the previous assignment.</p>
<b>15</b>	<b>Revision</b>	<b>Revision</b>

**5- Teaching and Learning Methods**

- Outline the suggested topic.
- Write the first draft of the topic.
- Peer-edit the topic using error detection and error analysis techniques.
- Use various means of writing a topic including description, illustration and discussion.

**6-Teaching and Learning Methods for Students with Special Needs**

- Consulting with lecturer during office hours.
- Consulting with teaching assistant during office hours.
- Private sessions for redelivering the lecture contents.
- For handicapped accessibility, please refer to program specification.

**7- Student Assessment**

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**Grading System:** 30 % 7<sup>th</sup> week exam - 20 % 12<sup>th</sup> week exam - 10 % class participation - 40 % Final exam

**8- List of References:**

<b>a- Course Notes</b>	N/A
<b>b- Required Books (Textbooks)</b>	Riordan, D.G. & Pauley S.E. <i>Technical Report Writing Today, Ninth Edition</i> , Houghton Mifflin Company, 2005.
<b>c- Recommended Books</b>	<a href="http://owl.english.purdue.edu/owl/resource/747/01/">http://owl.english.purdue.edu/owl/resource/747/01/</a> <ul style="list-style-type: none"> <li>• <a href="http://owl.english.purdue.edu/owl/resource/560/01/">http://owl.english.purdue.edu/owl/resource/560/01/</a></li> </ul>
<b>d- Periodicals, Web Sites, etc.</b>	N/A

**Course coordinator:**

**Program Manager:**