Engineering Drawing and Projection

Basic Course Specification		
Course Title	**Course Code**	**Program on which the course is given**
Engineering Drawing and Projection	ME 151T	Bachelor
Academic Year	**Specialization** (hr/week)	**Pre-Requisites**
2020 - 2021	Lab. 3 Application 3 Credit 2	None

Overall Course Objectives

This course describes the basic information of engineering drawing and knows the different types for drawing, such as sectioning, pictorial drawing.

- This syllabus covers the requirements of the STCW-78 as amended. In particular Chapter III, Section A-III/1for the function "Maintenance and repair at the Operational Level", STCW-78, as amended.
- The syllabus is designed with the guide of IMO Model course7.04 version 2014 and function 3.

Course Learning Outcomes. By successful completion of the course each student will be able to:

Topic	Linking to PLOs	7th Week Assessment	12th Week Assessment	Class Activities	Final Exam
1. Describe basics of engineering drawing.	A,c, f			x	X
2. Prepare engineering drawings, computer graphics & specialized technical reports.	B,e	x	x	x	X
3. Perform the tasks related to engineering drawing.	G,k			x	X
4. Justify application of concepts related to engineering drawing.	b			x	X

Course Content

Lec./ Week #	Topic	Hrs.#	Lab.	Application
1	Introduction to AutoCAD Types of Drawing + Line work	6	3	3
2	AutoCAD basics Geometrical construction + Development and Dimensioning	6	3	3
3	Object construction and manipulation Three views projection	6	3	3
4	Object construction and manipulation Three views projection and free hand sketching	6	3	3
5	Object construction and manipulation Third view projection	6	3	3
6	Object modification Third view projection	6	3	3

Course Content				
Lec./ Week #	**Topic**	**Hrs.#**	**Lab.**	**Application**
7	Object modification 7th week Exam	**6**	**3**	**3**
8	Object modification Third view projection and intersecting of geometrical surfaces	6	3	3
9	layers + Text Sectioning	6	3	3
10	Dimensioning Sectioning	6	3	3
11	Lay out and plotting Standard metal sections and metal structure	6	3	3
12	Section views, hatching + 2D analysis Compound metal and welding + 12th week Exam	**6**	**3**	**3**
13	Section views, hatching + 2D analysis Pictorial drawing (Isometric)	6	3	3
14	Isometric drawing Pictorial drawing (Isometric) and perspective projection	6	3	3
15	Isometric drawing Perspective projection	6	3	3
16	Final Exam			
Total Hours		**90**	**45**	**45**

Teaching & Learning Methods	**Facilities Required for Teaching & Learning Methods**
• Lectures • Tutorials • Assignments &sheets	• White board • Drawing Lab. including computers.

Students Assessment Methods	
Assessment Schedule	
Assessment#1	Week 7
Assessment#2	Week 12
Assessment#3	Week 16

Grading Method		
7th Week Assessment	Written Exam	**30%**
12th week Assessment	Written Exam	**20%**
Class Activities	Participation and Quiz	**10%**
Final Exam	Written Exam	**40%**
Total		**100 %**

Assessment criteria meets the standards of the STCW 78 convention "as amended"; and in the light of the related IMO model courses.

Staff Requirements	
Ph.D.	
List of References	
Course Notes	**Essential Books**
Course content and assignments are prepared by Department Staff, 2019	None
Recommended Books	**Periodicals and Publications**
None	None

Accreditation Bodies
*Egyptian Authority for Maritime Safety (EAMS)
*European Commission (EC)
*ISO (9001 – 2015) - DNV-GL
*Central Evaluation and Accreditation Agency Hanover, Germany (ZEVA)
*Ministry of Education (KSA)
Ministry of Higher Education (Greece)
*Ministry of Higher Education (Oman)
*Commission for Academic Accreditation (CAA), Ministry of higher Education (UAE)
*University of Plymouth, United Kingdom (dual degree)

Prepared by: Course Coordinator **Reviewed by: Head of Department**

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