Faculty: Engineering Technology

Department:Energy Program: Bachelor Degree

Academic year: 2024 - 2025 Semester:1st (Fall)



## **Course Plan**

## **First: Course Information**

Course No. 0906402	Course Title: Engineering Economy and Management	Credit Hours:3
Prerequisite: 80 hours	Section No.: 1	Lecture Time: 11-10:30,Sat, Mon,Wed
Type Of Course:		University Requirement FacultyRequirement orySpecialization requirement
Type of Learning:	☐ Face-to-Face Learning ☐ BlendedLearning(2 Face-to-Face + 1Asynch ☐ Online Learning (2 Synchronous+1 Asynch	

#### **Second: Instructor's Information**

Name: Dr. Mais Alzgool			Academic Rank: Assistant Professor			
Office Number: 136 l			Ext. Number: 2039			E-mail: maisalzgool@yahoo.com
Office Hours:	Sunday 1-2	Monday 12-1	Tuesday 1-2	Wednesday 12-1	<b>Thur</b> 12-1	sday

#### **Third: Course Description**

Foundations of engineering economy, factors accounting for time value of money ( TMV ), combining factors, nominal and effective rates, present and future worth analysis, annual worth analysis, rate of return analysis: Single and multiple projects. Principles of engineering management.



# **Fourth: Learning Source**

Main Reference:	Engineering E	conomy	
Author:by Blank and	Tarquin	Issue No.:6th,ed	Publication Year: (2017)
Additional Sources&Websites:	•		
Teaching Type:	Classroom [	☐ Laboratory ☐ WorkshopMS	S   Teams   Moodle

# Fifth: Learning Outcomes

Course Code	CourseIntendedLearning Outcomes (CILOs)	Connection To Program ILOs Code				
	Knowledge					
**K1	<u>Identify</u> and solve time value of money problems.	*PK1				
K2	Apply present, future, annual worths and internal rate of return analyses to solve economic problems.	PK2				
	Skills					
***S1	<b>Evaluate</b> multiple alternatives using economic factors to determine the best alternative ones	PS1				
	Competencies					
****C1	<u>Identify</u> engineering management principles	PC1				

<sup>\*</sup> P: Program, \*\*K: knowledge, \*\*\*S: skills, \*\*\*\*C: competencies.

# **Sixth: Course Structure**

Day	ILO	Topic(s)	Teaching Procedure*	Teaching Methods**	References*
13/10/2024		Introduction to atomic and nuclear physical	Interactive lectures, using PPT slides/class notes, digital pen.	lecturing, discussion, problem solving.	University actual attendance
15/10/2024		Introduction to atomic and nuclear physical	Interactive lectures, using PPT slides/class notes, digital pen.	lecturing, discussion, problem solving.	University actual attendance
17/10/2024		Introduction to atomic and nuclear physical	Self-learning online activity	Education Video	Moodle



Day	ILO	Topic(s)	Teaching Procedure*	Teaching Methods**	References*
20/10/2024		Introduction to atomic and nuclear physical	Interactive lectures, using PPT slides/class notes, digital pen.	lecturing, discussion, problem solving.	University actual attendance
22/10/2024		Introduction to atomic and nuclear physical	Interactive lectures, using PPT slides/class notes, digital pen	lecturing, discussion, problem solving.	University actual attendance
24/10/2024		Introduction to atomic and nuclear physical	Self-learning online activity	Education Video	Moodle
27/10/2024		Introduction to atomic and nuclear physical	Interactive lectures, using PPT slides/class notes, digital pen.	lecturing, discussion, problem solving.	University actual attendance
29/10/2024		Introduction to atomic and nuclear physical	Interactive lectures, using PPT slides/class notes, digital pen.	lecturing, discussion, problem solving.	University actual attendance
31/10/2024		Introduction to atomic and nuclear physical	Self-learning online activity	Education Video.	Moodle
3/11/2024		Atomic structure	Interactive lectures, using PPT slides/class notes, digital pen.	lecturing, discussion, problem solving.	University actual attendance
5/11/2024		Atomic structure	Interactive lectures, using PPT slides/class notes, digital pen.	lecturing, discussion, problem solving.	University actual attendance
7/11/2024		Atomic structure	Self-learning online activity	Education Video.	Moodle
10/11/2024		Atomic structure		Quiz 1	University actual attendance
12/11/2024		Atomic structure	Interactive lectures, using PPT slides/class notes, digital pen.	lecturing, discussion, problem solving.	University actual attendance
14/11/2024		Atomic structure	Self-learning online activity	Education Video.	Moodle
17/11/2024		Decay of radioactive nuclei	Interactive lectures, using PPT slides/class notes, digital pen.	lecturing, discussion, problem solving.	University actual attendance
19/11/2024		Decay of radioactive nuclei	Interactive lectures, using PPT slides/class notes, digital pen.	lecturing, discussion, problem solving.	University actual attendance



Day	ILO	Topic(s)	Teaching Procedure*	Teaching Methods**	References*
21/11/2024		Decay of radioactive nuclei	Self-learning online activity	Education Video.	Moodle
24/11/2024		Decay of radioactive nuclei	Interactive lectures, using PPT slides/class notes, digital pen.	lecturing, discussion, problem solving.	University actual attendance
26/11/2024		Decay of radioactive nuclei	Interactive lectures, using PPT slides/class notes, digital pen.	lecturing, discussion, problem solving.	University actual attendance
28/11/2024		Decay of radioactive nuclei	Self-learning online activity	Education Video.	Moodle
1/12/2024		Nuclear reactions Exam1 ( up to end of week 5 )	Interactive lectures, using PPT slides/class notes, digital pen.	Student presenting role	University actual attendance
3/12/2024		Nuclear reactions Exam1 ( up to end of week 5 )	Interactive lectures, using PPT slides/class notes, digital pen.	Student presenting role	University actual attendance
5/12/2024		Nuclear reactions Exam1 (up to end of week 5)	Self-learning online activity	Education Video.	Moodle
8/12/2024		Nuclear reactions Exam1 ( up to end of week 5 )	Interactive lectures, using PPT slides/class notes, digital pen.	lecturing, discussion, problem solving.	University actual attendance
10/12/2024		Nuclear reactions Exam1 ( up to end of week 5 )	Interactive lectures, using PPT slides/class notes, digital pen.	lecturing, discussion, problem solving.	University actual attendance
12/12/2024		Nuclear reactions Exam1 ( up to end of week 5 )	Self-learning online activity	Education Video.	Moodle
15/12/2024		Radiation detection	Interactive lectures, using PPT slides/class notes, digital pen.	lecturing, discussion, problem solving.	University actual attendance
17/12/2024		Radiation detection	Interactive lectures, using PPT slides/class notes, digital pen.	lecturing, discussion, problem solving.	University actual attendance
19/12/2024		Radiation detection	Self-learning online activity	Education Video.	Moodle
22/12/2024		Health physics	Interactive lectures, using PPT slides/class notes, digital pen.	lecturing, discussion, problem solving.	University actual attendance



Day	ILO	Topic(s)	Teaching Procedure*	Teaching Methods**	References*
24/12/2024		Health physics	Interactive lectures, using PPT slides/class notes, digital pen.		University actual attendance
26/12/2024		Health physics	Self-learning online activity	Education Video.	Moodle
29/12/2024		Health physics	Interactive lectures, using PPT slides/class notes, digital pen.	lecturing, discussion, problem solving.	University actual attendance
31/12/2024		Health physics	Interactive lectures, using PPT slides/class notes, digital pen.	lecturing, discussion, problem solving.	University actual attendance
2/1/2025		Health physics	Self-learning online activity	Education Video.	Moodle
5/1/2025		Health physics	Interactive lectures, using PPT slides/class notes, digital pen.	lecturing, discussion, problem solving.	University actual attendance
7/1/2025		Health physics	Interactive lectures, using PPT slides/class notes, digital pen.	lecturing, discussion, problem solving.	University actual attendance
9/1/2025		Neutron interactions Exam2 ( up to end of week 11	Interactive lectures, using PPT slides/class notes, digital pen.	lecturing, discussion, problem solving.	University actual attendance
12/1/2025		Neutron interactions Exam2 ( up to end of week 11	Interactive lectures, using PPT slides/class notes, digital pen.	lecturing, discussion, problem solving.	University actual attendance
14/1/2025		Neutron interactions Exam2 ( up to end of week 11	Interactive lectures, using PPT slides/class notes, digital pen.	lecturing, discussion, problem solving.	University actual attendance
16/1/2025		Neutron interactions Exam2 ( up to end of week 11	Interactive lectures, using PPT slides/class notes, digital pen.	lecturing, discussion, problem solving.	University actual attendance

<sup>\*</sup> Learning procedures: (Face-to-Face, synchronous, asynchronous). \* \* Teaching methods: (Lecture, video.....). \*\*\*
Reference: (Pages of the book, recorded lecture, video....)



#### **Seventh: Assessment methods**

Methods	Grade	Date	Platform	CLO'S
Mid Exam	30	Fixed by the Department	Classroom	K,S
Assign, Quizzes &Participation	20	During Semester	Classroom+Moodle	S,K
Final Exam	50	Fixed by the Department	Classroom	All CLOs

### **Eighth: Course Policies**

- All course policies are applied on all teaching patterns (online, blended, and face-to-face Learning) as follows:
  - a. Punctuality.
  - b. Participation and interaction.
  - c. Attendance and exams.
- Academic integrity: (cheating and plagiarism are prohibited).

Approved by:	Name	Date	Signature
Head of Department	Dr. AymanAmer	6/3/2023	el-
Faculty Dean	Prof. TaiseerAlghanim	6/3/2023	e 1ª

