

Theoretical and practical course plan form - Ilam University of Medical Sciences

Introducing the second semester of engineering economics

Faculty: Health

Department: Environmental Health

\* Course name and number: Engineering Economics

\* Field and degree: Bachelor of Environmental Health

\* Day and time: Tuesday 6-4

\* Venue: School of Health

\* Name of the person in charge of the course (instructor): Dr. Taheri

\* Prerequisite courses:

\* Office Address:

\* Email Address

**General Objective of the Lesson:** Cost Analysis - Benefits of Projects

• **Behavioral goals** (behavioral goals have an audience, behavioral verb, degree and criteria and conditions of performance)

**At the end of this course the student is expected to be able to:**

- Evaluate projects related to the area under study economically
- Get acquainted with different techniques of engineering economics
- Analyze the impact of various factors on project efficiency

**Student duties (student homework during the semester)**

- 1- Attending training sessions and actively participating in class discussions
- 2- Carrying out a project

• **Main sources** (observing the principles of source writing and giving an address for their preparation, including library, bookstore, internet ...)

1. Esco Nejad, Mohammad Mehdi (1385). Economic Engineering, Amirkabir Publications
2. Majidian, Davood (1390). Evaluation of industrial projects, Industrial Management Organization

• **Teaching methods and teaching aids used:**

- 1- Lecture using Power point
- 2- Description of contents and discussion
- 3- Discussing a topic in each session (with the student's prior knowledge about the topic)
- 4- Presenting a conference or research by students

**\* Educational aids used:**

1. Using a computer and projector
- 2- Using magic and whiteboard

**• Methods and time of assessment and evaluation of the student and the bar related to each assessment:**

Method	Score	Date	Time
Project	5		
midterm exam	5		
End of semester exam	10		

Lesson rules and expectations from students

Curriculum presentation schedule ... Engineering Economics..... Second semester2020-2021

Session	Time	Topic	Lecturer	Necessary preparation of students before the start of the class
1	16-18	Introduction and generalities	Dr. Taheri	
2		Basic concepts of economics		Reading material by the student to answer questions
3		Engineering Economics		
4		Basic concepts in engineering economics		
5		Engineering economics techniques and their application		
6		The role of depreciation and taxes in economic analysis		
7		The effects of lending on economic analysis		
8		Asset analysis in the project		

9		Estimating project resources		
10		Head-to-head analysis		
11		The effects of inflation and interest rates on the flow of project funds		
12		Analysis of social effects of the project		
13		Interest factors		
14		Project sensitivity analysis		
15		Familiarity with Kamfar software		
16		Review projects		