



COURSE SPECIFICATIONS (2011-2012)



Benha University

Faculty of Engineering at Shobra

Electrical Engineering Department

A- Basic Information

Course Title: Economics and Management

Code: GEN371

Lecture: 2

Tutorial:

Practical:

Total: 2

Program on which the course is given: B.Sc. Electrical Engineering (Power)

Major or minor element of program: Major

Department offering the program: Electrical Engineering Department

Department offering the course: Electrical Engineering Department

Academic year / level: **Third Year / Second Semester**

Date of specifications approval: 10/5/2006

B- Professional Information

1- Overall aims of course:

By the end of the course the students will be able to:

- Knowing the Principles of Economics and the importance of Economy for Engineering.
- Determination the costs, the project Benefits the economic feasibility of [projects].
- Understanding the quantitative and qualitative management.
- Knowing the standards of good manager and Decision-making

2- Intended learning outcomes of course (ILOs)

By completion of the course, the student should be able to:

a- Knowledge and Understanding

- a.5) Methodologies of solving engineering problems, data collection interpretation.
- a.7) Business and management principles relevant to engineering.
- a.8) Current engineering technologies as related to disciplines.



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- a.9) Topics related to humanitarian interests and moral issues.
- a.11) Professional ethics and impacts of engineering solutions on society and environment.
- a.16) Fundamentals of engineering management.

b- Intellectual Skills

- b.4) Combine, exchange, and assess different ideas, views, and knowledge from a range of sources.
- b.9) Judge engineering decisions considering balanced costs, benefits, safety, quality, reliability, and environmental impact.
- b.10) Incorporate economic, social, environmental dimensions and risk management in design.

c- Professional and Practical Skills

- c.8) Apply safe systems at work and observe the appropriate steps to manage risks.
- c.9) Demonstrate basic organizational and project management skills.
- c.10) Apply quality assurance procedures and follow codes and standards.
- c.11) Exchange knowledge and skills with engineering community and industry.

d- General and Transferable Skills

- d.1) Collaborate effectively within multidisciplinary team.
- d.2) Work in stressful environment and within constraints.
- d.3) Communicate effectively
- d.5) Lead and motivate individuals.
- d.6) Effectively manage tasks, time, and resources.
- d.7) Search for information and engage in life-long self learning discipline.
- d.8) Acquire entrepreneurial skills.
- d.9) Refer to relevant literatures.

3- Contents

No	Topic	No. of hours	ILO,s	Teaching / learning methods and strategies	Assessment
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1	Principles of Economics	2	a5, a7, a8, a9, a11, a16, b1, b4, b9, b10, c1, c7, c8,c9, c10, c11, d1, d3, d5,d8	Lectures, Class activity, Case study, Assignments / homework	Home assignments, Quizzes, Oral examination
2	Principles of Economics	2	a5, a7, a8, a9, a11, a16, b1, b4, b9, b10, c1, c7, c8,c9, c10, c11, d1, d3, d5,d8	Lectures, Class activity, Case study, Assignments / homework	Home assignments, Quizzes, Oral examination
3	Costs, Project Benefits, Economic feasibility	2	a5, a7, a8, a9, a11, a16, b1, b4, b9, b10, c1, c7, c8,c9, c10, c11, d1, d3, d5,d8	Lectures, Class activity, Case study, Assignments / homework	Home assignments, Quizzes, Oral examination
4	Costs, Project Benefits, Economic feasibility	2	a5, a7, a8, a9, a11, a16, b1, b4, b9, b10, c1, c7, c8,c9, c10, c11, d1, d3, d5,d8	Lectures, Class activity, Case study, Assignments / homework	Home assignments, Quizzes, Oral examination
5	Economic comparison, Economic life	2	a5, a7, a8, a9, a11, a16, b1, b4, b9, b10, c1, c7, c8,c9, c10, c11, d1, d3, d5,d8	Lectures, Class activity, Case study, Assignments / homework	Home assignments, Quizzes, Oral examination
6	Economic comparison, Economic life	2	a5, a7, a8, a9, a11, a16, b1, b4, b9, b10, c1, c7, c8,c9, c10, c11, d1, d3, d5,d8	Lectures, Class activity, Case study, Assignments / homework	Home assignments, Quizzes, Oral examination
7	Definitions of Directors, School administration.	2	a5, a7, a8, a9, a11, a16, b1, b4, b9, b10, c1, c7, c8,c9, c10, c11, d1, d3, d5,d8	Lectures, Class activity, Case study, Assignments / homework	Home assignments, Quizzes, Oral examination



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8	Mid-Term Exam				
9	Destinations in the quantitative and qualitative management	2	a5, a7, a8, a9, a11, a16, b1, b4, b9, b10, c1, c7, c8,c9, c10, c11, d1, d3, d5,d8	Lectures, Class activity, Case study, Assignments / homework	Home assignments, Quizzes, Oral examination
10	Destinations in the quantitative and qualitative management	2	a5, a7, a8, a9, a11, a16, b1, b4, b9, b10, c1, c7, c8,c9, c10, c11, d1, d3, d5,d8	Lectures, Class activity, Case study, Assignments / homework	Home assignments, Quizzes, Oral examination
11	Importance of management in engineering, Director, Commander.	2	a5, a7, a8, a9, a11, a16, b1, b4, b9, b10, c1, c7, c8,c9, c10, c11, d1, d3, d5,d8	Lectures, Class activity, Case study, Assignments / homework	Home assignments, Quizzes, Oral examination
12	standards of good manager, Decision-making,	2	a5, a7, a8, a9, a11, a16, b1, b4, b9, b10, c1, c7, c8,c9, c10, c11, d1, d3, d5,d8	Lectures, Class activity, Case study, Assignments / homework	Home assignments, Quizzes, Oral examination
13	technical and humanitarian aspects of the study of managerial behavior.	2	a5, a7, a8, a9, a11, a16, b1, b4, b9, b10, c1, c7, c8,c9, c10, c11, d1, d3, d5,d8	Lectures, Class activity, Case study, Assignments / homework	Home assignments, Quizzes, Oral examination
14	technical and humanitarian aspects of the study of managerial behavior.	2	a5, a7, a8, a9, a11, a16, b1, b4, b9, b10, c1, c7, c8,c9, c10, c11, d1, d3, d5,d8	Lectures, Class activity, Case study, Assignments / homework	Home assignments, Quizzes, Oral examination
15	Final Exam				
16					



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4- Teaching and Learning Methods

Lectures
Class activity
Case study
Assignments / homework

5- Student Assessment Methods

Assignments to assess knowledge and intellectual skills.
Quiz to assess knowledge, intellectual and professional skills.
Mid-term exam to assess knowledge, intellectual, professional and general skills.
Oral exam to assess knowledge and intellectual skills.
Final exam to assess knowledge, intellectual, professional and general skills.

Assessment Schedule

Assessment 1 on weeks 2, 5, 9, 11
Assessment 2 Quizzes on weeks 4, 6, 10, 12
Assessment 3 Mid-term exam on week 8
Assessment 4 Oral Exam on week 14
Assessment 5 Final exam on week 15

Weighting of Assessments

05% Home assignments
05% Quizzes
10% Mid-term examination
20% Oral examination
60% Final-term examination
100% Total

6- List of References



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Course notes

Course notes prepared by instructor.

Essential books

economics and management engineering text books

Recommended books

text books of economics

text books of engineering management

text books of practical engineering economics

7- Facilities required for teaching and learning

Lecture room equipped with overhead projector

Presentation board, computer and data show

Laboratory

Course coordinator: Prof.

Course instructor: Prof. Dr.

Head of Department: Prof. Dr. Mousa A Abd-Allah

Date: 1/2/2012