

Course Description

Subject: Operational Research

This course description provides a brief survey of the most important characteristics, expected learning output, showing whether students have made full use of the learning opportunities. These characteristics have to be matched with the description of the program.

1. Educational Institution	Shatt Al-Arab University College
2. Department / Center	Business Administration
3. Course Title /Code	Operational research
4. Lecturer Name	Mohammed Abood Tahir
5. Type of Teaching	Attendance
6. Academic Year /Term	3 rd BA315
7. Total No. of Teaching Hours	45
8. Date of Preparing this Course Description	12/11/2023

9. Course Objectives

a. Providing students with the most important principles and basics of operational research
b. Teaching students how to apply operational research
c. Providing graduates with the necessary knowledge on operational research job in organizations.
d. Improving the administrative skills in the field of operational research
e. Providing graduates with the skills of education and creative learning.

10. Course Output, Methodology and Evaluation

(A) Cognitive Objectives

a. Enabling students to acquire knowledge and the art of operational research
b. Acquainting students with how to promote their personal knowledge.
c. Helping students to acquire knowledge in the art of operational research.
d. Enabling students to sharpen their skills in the dynamic work environment.
e. Enabling students to invest their scientific abilities in their working place in the scope of operational research.
f. Helping students to get the necessary knowledge to solve problems operational research

(B) Skill Objectives Related to the Program:

a. Scientific Skills
b. Leadership Skills
c. Skills Related to Administrative Work Challenges

Methods of Teaching and Learning

a. Using already- prepared lectures.
b. Using up-to-date data shows.
c. Homework
d. Adopting group discussions.

Methods of Evaluation

a. Oral tests
b. Monthly tests
c. Daily quizzes
d. Students' Regular Attendance

(C) Sentimental and Value Objectives

a. Realizing ethical objectives.
b. Commitment to university traditions.
c. Compliance with the University Instructions and the Ministry Regulations.
d. Promoting students' personal abilities in educational scopes and how to behave well with others.

Methods of Teaching and Learning

a. Lectures on university instructions.
b. Educational guidance lectures.
c. Continuous directing.
d. Visiting State and private institutions.
e. Showing practical cases.

Methods of Evaluation

a. Daily quizzes.
b. Classroom discussions and commitment to ethics and sublime values.
c. Special marks for class activities.
d. Monthly and quarterly evaluation.

D) General and Qualitative Skills (other skills related to the ability of employment and personal development)

a. Enabling students to acquire the skill and art of operational research
b. Enabling students to apply creative thinking in operational research
c. Enabling students to use modern methods of analysis and conclusions.
d. Enabling students to operational research

11. Course Structure

Week	No of Hours	Required Learning Output	Title of Subject	Teaching Method	Evaluation
1	3	understanding the material	Introduction in operational research formulation of linear programming model	- lectures - case study -discussions	- oral tests -questions
2	3	understanding the material	Graphical solution for solving linear programming problems	- lectures - case study -discussions	- oral tests -questions
3	3	understanding the material	Simplex method	- lectures - case study -discussions	- oral tests -questions
4	3	understanding the material	Duality of linear programming	- lectures - case study -discussions	- lectures - case study -discussions
5	3	understanding the material	Transportation model	- lectures - case study -discussions	- lectures - case study -discussions
6	3	understanding the material	Transportation model	- lectures - case study -discussions	- lectures - case study -discussions
7	3	understanding the material	Assignment model	- lectures - case study -discussions	- lectures - case study -discussions
8	3	understanding the material	Assignment model	- lectures - case study -discussions	- lectures - case study -discussions
9	3	understanding the material	Network	- lectures - case study	- lectures - case study

				-discussions	-discussions
10	3	understanding the material	Network	- lectures - case study -discussions	- lectures - case study -discussions
11	3	understanding the material	Game theory	- lectures - case study -discussions	- lectures - case study -discussions
12	3	understanding the material	Game theory	- lectures - case study -discussions	- lectures - case study -discussions
13	3	understanding the material	Queuing theory	- lectures - case study -discussions	- lectures - case study -discussions
14	3	understanding the material	Queuing theory	- lectures - case study -discussions	- lectures - case study -discussions
15	3	understanding the material	Exam	- lectures - case study -discussions	- lectures - case study -discussions

12. Infrastructure

a. Textbooks	Operational by H Taha
b. References	
c. Recommended books and periodicals (journals, reports, etc.)	
d. Electronic references, internet websites, etc	

13. The Plan of Improving the Course

a. Studying labor market needs.
b. Be informed of the experiences of other countries in the field of -----.
c. Be informed of research work published in national and international journals in the field of -----.