Course Description Form

Description of the location

This course description provides a concise summary of the main course features and the learning outcomes expected of the student, demonstrating whether the student has made the most of the available learning opportunities. It must be linked to the program description.

.1 Educational institution	Shatt al-Arab University / College of Science
.2 Scientific Department/Center	Computer Science
.3 Course Name/Code	Operation research for business Operations Research for Business
4. Available forms of attendance	regular
.5 Semester/Year	Chapter Two
6. Number of study hours (total)	Third hour of theory
.7 Date this description was prepared	2024-2025

8. Course objectives

.1 Modeling real-life problems using different mathematical formulas.

.2 Finding a solution to a problem available in the labor market after modeling it using different solution methods.

3. Search for the best solution to the problem and search for the best method used to deliver the product to Labor market.

9. Course outcomes, teaching, learning and assessment methods.

A- Cognitive objectives

-1 Enabling the student to identify problems in the market

-2 The student's ability to model real-life problems.

B-Skill objectives of the course

-1 Work in a team to solve a problem in the labor market

Teaching and learning methods

1. Using the lecture method to deliver the scientific material . 2. Using the brainstorming method. 3. Assigning the student to work on a project from within the lecture vocabulary.

Evaluation methods

1. Daily, monthly, and final exams. 2. Projects carried out by the student to transform problems into mathematical formulas and find the optimal solution.

C- Emotional and value goals

C-1 Raising the spirit of cooperation and teamwork. C-2 Bringing out creative ideas among some students by raising the spirit of competition.

Teaching and learning methods

Providing distinguished educational and research services that keep pace with local and international quality standards in the field of computer science. And information technology, which allows for the preparation of a distinguished, competitive graduate, in addition to the completion of advanced scientific research and effective participation in serving society and building a knowledge-based economy.

Evaluation methods

- Adopting classroom discussions. - Objective tests and diversifying the questions posed, such as true or false questions and multiple-choice questions.

- Applying theoretical issues in the form of a linear programming model.

D - General and transferable skills (other skills related to employability and personal development).

-1 Understanding the ethics of the work environment and high professionalism

-2 Develop the skill of communicating with potential and actual users and understanding their needs.

10. Course structure

Unit name/learning method	Assessment method	Subject	Required learning outcomes	watches	The week
		Linear programming	Understanding the components of a model Linear programming	3	The first
		Programming formulas sin	Learn about formulas Programming Sin and dealing with it	2	the second
		Practical examples	Student's ability to Convert any real problem into Labor market and its transformation To a mathematical model	2	the third
		Graphic method To solve the model Linear programming	Solving problems using the graphical method	2	Fourth
		The simplified method	Solve problems that Analyze the rhetorical method	2	Fifth
		The simplified method	Solving problems that can be solved graphically	2	Sixth
		The corresponding model	Convert form to The corresponding formula And find a solution for it	2	Seventh

		Transportation issues Initial solution	Learn how Transport goods at a lower price Possible cost	**2**	**The eighth**
		Transportation issues The ideal solution	Learn how Transport goods at a lower price Possible cost	**2**	**Ninth**
		problems Customization	Get to know Optimal allocation	**2**	**tenth**
		discussion	Project work from Vocabulary Course and its applications Exclusively from the market	**2**	**The eleventh**

11.Infrastructure	
	-1 Required textbooks
	-2 Main references (sources)
	A(Recommended books and references) scientific journals, reports, etc.
	b) Electronic references, websites, etc.

12. Curriculum Development Plan
Develop programs using MATLAB to find the optimal solution to problems in the labor market.

مدرس المادة	رئيس القسم	عميد الكلية