

Republic of Iraq

Ministry of Higher Education & Scientific
Research Supervision and Scientific
Evaluation Directorate Quality Assurance
and Academic Accreditation International
Accreditation Dept.

Academic Program Specification Form For The Academic

University: Thi - Qar University

College College of Administration and Economics

Number Of Departments In The College :Economics

: Date Of Form Completion :

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Dean's Name Date :

/ /

Dean's Assistant
For Scientific
Affairs

Signature

Date : / /
Signature

The College Quality
Assurance And
University
Performance
Manager

Date : / / Signature

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Quality Assurance And University Performance

Manager Date : / /

Signature

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TEMPLATE FOR PROGRAMME SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

PROGRAMME SPECIFICATION

This Programme Specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It is supported by a specification for each course that contributes to the programme.

Operations Research course

1. Teaching Institution	Dhi Qar University/ College of Administration and Economics
2. University Department/Centre	Department of Economics
3. Programme Title	Operations Research –Fourth Class
4. Title of Final Award	Online Learning
5. Modes of Attendance offered	Courses / second course
6. Accreditation	20 hours
7. Other external influences	
8. Date of production/revision of this specification	5/5/2022
9. Aims of the Programme	
Providing the academic student with important applied statistical information and	

methods of selecting random samples from the statistical community and clarifying the relationship of statistics to the economy through the application of statistical methods to the data, drawing conclusions and interpreting them in an economical interpretation

10. Learning Outcomes, Teaching, Learning and Assessment Methods

Cognitive goals

A1- The student's understanding of the concept of operations research, which has become tangible in every stage of human scientific activity.

A2- The student understands the methods and methods of operations research through realistic examples that transfer the student to practical life as well as simplifying the scientific economic concept of mathematical models.

A3- The student's understanding of operations research and its important applications in daily life through two aspects, the first: a theory that scales in depth to suit different students and their scientific levels. The second: an applied multi-field to include the interests of a large group of specialists.

B - Skills objectives of the course.

B1 - Practical skills of examples from practical reality in daily life that some companies and factories face, finding a linear programming model for the problem facing the company, solving the model and interpreting the variables.

B 2- Applying the scientific method by providing a quantitative basis that enables management to make decisions by solving problems facing a particular company or factory using operations research tools and methods such as linear programming, numerical programming, non-numerical programming and network analysis, in order to enable management to take more objective decisions.

B 3- How to introduce operations research into the rest of the different sectors of life (economic, agricultural and service).

Teaching and Learning Methods

- How to deliver the lecture.
- How to ask oral questions when explaining the material.
- Discussion method.

Assessment methods

- Asking objective questions to answer (true and false)
- Discussions on the topic
- Monthly exams during the semester
- Final Exams

C. Affective and value goals

C1- Acquiring knowledge through familiarity with the basics of the subject and how to transform the problem from its verbal form to its linear programming form, and then finding a solution to the linear programming problem for the purpose of decision-making.

C2- Studying and understanding the characteristics of the variables facing the problem and knowing the number of variables and how to find their values.

C3 - The student's ability to bring the administrative problem closer to reality according to simplified scientific formulas and specific mathematical models that show the components of the problem within frameworks of organized and rational scientific thinking.

C4 - Dissemination of standard and ideal standards for decision-making and the application of these standards in the future when faced with a similar problem.

C5 - Presenting the mathematical models of operations research in a way that shows the different opportunities for the decision-making process, which contributes to the interpretation of the elements of the problem and the factors affecting it.

D. General and Transferable Skills (other skills relevant to employability and personal development)

D1- The specialist in operations research was able to apply operations research and benefit from its means by formulating the problem in the form of a model used in rationalizing the decision to be taken by designing a miniature system that expresses in one way or another the actual system within what is known as simulation of reality.

D2 - Develop an optimal measure of comparison so that this is based on the availability of accompanying conditions and capabilities so that the solution can become possible when using the linear programming method.

D3- How to test the results by comparing the results with a previous time series of the decision variables included in the model.

Teaching and Learning Methods

Review assignments and discuss them at the beginning of the lecture - panel discussions - scientific discussions and give examples

Assessment Methods

- 1- Student participation in preparing and explaining the material
- 2- Conducting discussions of external questions related to the material from reality as an attempt to link the theoretical side of the material with the external reality
- 3- Assigning students to develop an administrative problem from daily life and to treat this problem mathematically using linear programming and to develop appropriate solutions to reduce this problem.
- 4- Oral tests on the topics covered in the subject of the study.

11. course Structure

week	Course or Module Code	Course or Module Title	Method learning
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1		binary form (opposite)	lecture and discussion
2		binary form (opposite)	lecture and discussion
3		binary form (opposite)	lecture and discussion
4		binary form (opposite)	lecture and discussion
5		binary form (opposite)	lecture and discussion
6		transport models	lecture and discussion
7		transport models	lecture and discussion
8		transport models	lecture and discussion
9		transport models	lecture and discussion
10		transport models	lecture and discussion
11		Diagnostic models	lecture and discussion
12		Diagnostic models	lecture and discussion
13		Diagnostic models	lecture and discussion
14		Diagnostic models	lecture and discussion
15		Diagnostic models	lecture and discussion

11. Infrastructure	
1. Books Required reading:	
2. Main references (sources)	Operations research concept and application, d. Hamed Saad Nour Al-Shamrty, 2010
A- Recommended books and references (scientific journals, reports...).	
B-Electronic references, Internet sites...	

12. The development of the curriculum plan
1- Using modern statistical methods and comparing them with traditional methods to find out the best among them.
2- Using statistical methods to study the impact of economic theory.