Ministry of Higher Education and Scientific Research
Supervision and Scientific Evaluation Authority
Department of Quality Assurance and Academic Accreditation

Academic Program Description Form for Colleges and Institutes
Academic Year

University: Shatt Al-Arab
College/Institute: Engineering
Scientific Department: Civil
Date of Form Completion: 01/09/2024

Signature **Signature**
Name of Head of Department:

Asst. Lecturer Nabeel Najm Abdullah **Name of Scientific Assistant:** Dr. Jawad Kadhim

Reviewed by:
Quality Assurance and University Performance Division
Name of Division Director: Dr. Jasem Mohsen Yasser

Signature:

الدكتور
جاسم محسن ياسر
Dr.Jasim Al-Battat

أ.م.د.احسان قاسم محمد
عميد كلية الهندسة

Dean's Approval

TEMPLATE FOR COURSE SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

COURSE SPECIFICATION

The model description provides a brief description of the main features of the course and the scientific outputs that the model student is expected to achieve if the student takes advantage of the learning opportunities available for the course. It should be compared with the description of the program.

1. Teaching Institution	Shatt Al-Arab University
2. University Department/Centre	Civil Engineering Department
3. Course title/code	**Transportation Engineering (CE317)**
4. Modes of Attendance offered	Class attendance
5. Semester/Year	2nd semester / 3rd year
6. Number of hours tuition (total)	45 hrs.
7. Date of production/revision of this specification	2024
8. Aims of the Course	
▯ This course aims to introduce the basic concepts of transportation planning as an introduction to the study of the process of forecasting demand for travel and public transportation.	

9· Learning Outcomes, Teaching, Learning and Assessment Method

A. **Cognitive and educational objectives**

1. Apply the basic elements of transportation planning.
2. Apply the sequential steps of the travel demand forecasting process (four-step process).
3. Introduction to public transportation.

B. **Course specific skill objectives**

1. Ability to identify and analyze engineering problems.
2. Apply quantitative and numerical methods for the purpose of solving transportation engineering problems.
3. Ability to design, collect, analyze and interpret data and information.

Teaching and Learning Methods

• Scientific and research skills are developed through teaching and learning activities. Analytical and problem-solving skills are further developed through a set of problems prepared by the lecturers in small study groups and all work submitted is assessed and responded to.

Assessment methods

• Interacting within the lecture.
• Homework and reports.
• Short exams (quizzes).
• Semester and final exams.

C. Thinking Skills

C1- Attention: Arousing the students' attention by implementing one of the applied programs on the display screen in the hall.

C2- Response: Follow up the student's interaction with the material displayed on the screen.

C3- Attention: Follow up on the interest of the student who interacted more with the presented material, by increasing this interaction by requesting other programs and applications to display.

C4 - Forming the direction: meaning that the student is sympathetic to the presentation and may have an opinion about the direction of the presented topic and defend it.

C 5- Formation of value behavior: meaning that the student reaches the top of the emotional ladder, so that he has a stable level in the lesson and does not become lazy or fidgety.

Teaching and Learning Methods

- The usual theoretical presentation method using the writing board and depending on the style (how and why) of the subject and according to the curriculum of the subject.
- The theoretical presentation method using the (data show) device and depending on the method (how and why) of the subject and according to the subject curriculum.
- The method of laboratory display using special devices for measuring the different properties of the substance under experiment.

Assessment methods

- Direct questions in a manner (how and why) for the subject during the theoretical and practical lecture.
- Sudden exams during the theoretical and practical lecture.
- Quarterly exams for the theoretical and practical side.

- Final exams for the theoretical and practical side.

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

D1- Develop the student's ability to perform the duties and deliver them on time

D2 - Logical and programmatic thinking to find programmatic solutions to various problems

D3 - developing the student's ability to dialogue and debate

D4 - Develop the student's ability to deal with modern technology, especially the Internet

10. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1	3	**Introduction to Transportation Engineering**	**Introduction and Background**	Th. Lecture	Written exam
2	3	**Introduction to Transportation Engineering**	**History of transportation engineering**	Th. Lecture	Written exam
3	3	**Introduction to Transportation Engineering**	**Modes of Transportation & mode selection**	Th. Lecture	Written exam
4	3	**Transportation Planning Urban**	**transportation Planning**	Th. Lecture	Written exam
5	3	**Basic Elements of Transportation Planning**	**Transportation Planning**	Th. Lecture	Written exam
6	3	**Travel Demand Forecasting**	**Travel Demand Forecasting process**	Th. Lecture	Written exam

7	3	**Travel Demand Forecasting**	**Data Collection**	Th. Lecture	Written exam
8	3	**Travel Demand Forecasting**	**Trip Generation**	Th. Lecture	Written exam
9	3	**Travel Demand Forecasting**	**Trip Generation**	Th. Lecture	Written exam
10	3	**Travel Demand Forecasting**	**Trip Distribution**	Th. Lecture	Written exam
11	3	**Travel Demand Forecasting**	**Modal Split**	Th. Lecture	Written exam
12	3	**Travel Demand Forecasting**	**Traffic Assignment**	Th. Lecture	
13	3	**Public Transportation**	**Bus and Rail Operations**	Th. Lecture	Written exam
14	3	**Public Transportation**	**Capacity of Bus Stop**	Th. Lecture	Written exam
15	3	**Public Transportation**	**Constructing Route Schedule**	Th. Lecture	Written exam

11. Infrastructure	
1- Required reading: · Books · COURSE MATERIALS · OTHER	Traffic & Highway Engineering (4th Edition, SI) Nicholas J. Garber and Lester A. Hoel Cengage Learning, Stamford, USA, 2010.
2. Key references (sources)	1. Highway and Traffic Engineering in Developing Countries by Bent Thagesen. 2. Traffic and Highway Engineering by Nicholas J. Garber and Lester A. Hoel.
A- Recommended books and references (scientific journals, reports ,....	Library locations in some international universities.
B- Electronic references, websites	Reputable websites. Libraries sites in some international universities.

12. Course development plan
Adding new subjects to the curricula within the development of the course by no more than 5%. Adding new references