

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

Name of Head of Department:

Asst. Lecturer Nabeel Najm Abdullah

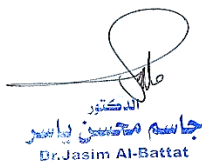


Signature

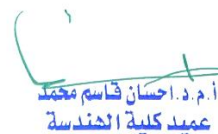
Name of Scientific Assistant: Dr. Jawad Kadhim

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

Signature:



الدكتور
جاسم مهنين 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.

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| 1. Teaching Institution | Shatt Al-Arab University |
| 2. University Department/Centre | Civil Engineering Department |
| 3. Course title/code | Engineering Management \ CE316 |
| 4. Modes of Attendance offered | Class attendance |
| 5. Semester/Year | 1 st semester / 3 rd year |
| 6. Number of hours tuition (total) | 30 hrs. |
| 7. Date of production/revision of this specification | 2024 |
| 8. Aims of the Course | |
| <input type="checkbox"/> Teaching undergraduate students how to deal with applied engineering programs such as the EPANET program used to analyze and For water network design, as well as the Microsoft Project program used in planning construction projects, estimating costs and project completion time, and controlling projects. | |

9. Learning Outcomes, Teaching, Learning and Assessment Method

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| <p>A-Learning outcome</p> <p>1- Teaching students how to deal with construction programs in an integrated manner and comparing with the theoretical study to design and analyze For water network design.</p> <p>2- Teaching students how to create quantity schedules for construction projects by controlling the workflow</p> |
| Teaching and Learning Methods |
| <ul style="list-style-type: none"> •Theoretical lectures, practical lectures, small discussion groups, presentation of scientific films, and writing reports. |
| Assessment methods |
| <ul style="list-style-type: none"> • Interacting within the lecture. • Homework and reports. • Short exams (quizzes). • Semester and final exams. |
| <p>C. Thinking Skills</p> <p>C1- Attention: Arousing the students' attention by implementing one of the applied programs on the display screen in the hall.</p> <p>C2- Response: Follow up the student's interaction with the material displayed on the screen.</p> <p>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.</p> <p>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.</p> <p>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.</p> |

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| Teaching and Learning Methods |
| <ul style="list-style-type: none"> • 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 |
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| <ul style="list-style-type: none"> • 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. |
| <ul style="list-style-type: none"> • Final exams for the theoretical and practical side. |
| <p>D. General and Transferable Skills (other skills relevant to employability and personal development)</p> <p>D1- Develop the student's ability to perform the duties and deliver them on time</p> <p>D2 - Logical and programmatic thinking to find programmatic solutions to various problems</p> <p>D3 - developing the student's ability to dialogue and debate</p> <p>D4 - Develop the student's ability to deal with modern technology, especially the Internet</p> |

| 10. Course Structure | | | | | |
|----------------------|-------|--|--|-----------------|-------------------|
| Week | Hours | ILOs | Unit/Module or Topic Title | Teaching Method | Assessment Method |
| 1 | 2 | Learn about engineering management | Introduction to project management | Th. Lecture | Written exam |
| 2 | 2 | Learn about project planning methods | Project planning ✓ | Th. Lecture | Written exam |
| 3 | 2 | Learn about project planning methods | Project planning | Th. Lecture | Written exam |
| 4 | 2 | How to draw using a Gantt chart ✓ | Bar chart (Gantt chart) | Th. Lecture | Written exam |
| 5 | 2 | How to draw using a Gantt chart | Bar chart (Gantt chart) | Th. Lecture | Written exam |
| 6 | 2 | How to draw a network analysis method (arrow method) | network analysis method (arrow method) | Th. Lecture | Written exam |

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|----|---|---|---|-------------|--------------|
| 7 | 2 | How to draw a network analysis method (Rectangles method) | network analysis method (Rectangles method) ✓ | Th. Lecture | Written exam |
| 8 | 2 | How to find critical path activities | Critical Path Method (CPM) | Th. Lecture | Written exam |
| 9 | 2 | Project Resource Management (Leveling) | How to manage project resources in a (Leveling) | Th. Lecture | Written exam |
| 10 | 2 | Project Resource Management (Scheduling) | How to manage project resources in a (Scheduling) | Th. Lecture | Written exam |
| 11 | 2 | Program Evaluation and Review Technique (PERT) | How to solve the diagram in a way (PERT) | Th. Lecture | Written exam |
| 12 | 2 | Program Evaluation and Review Technique (PERT) | How to solve the diagram in a way (PERT) | Th. Lecture | Written exam |
| 13 | 2 | Repetitive Projects Planning by Line of Balance (LOB) | How to draw recurring charts LOB method | Th. Lecture | Written exam |
| 14 | 2 | Repetitive Projects Planning by Line of Balance (LOB) | How to draw recurring charts LOB method | Th. Lecture | Written exam |
| 15 | 2 | Repetitive Projects Planning by Line of Balance (LOB) | How to draw recurring charts LOB method | Th. Lecture | Written exam |
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| 11. Infrastructure | |
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| 1- Required reading: · Books · COURSE MATERIALS · OTHER | A Guide to the project management body of knowledge - PMI |
| 2. Key references (sources) | 1. Project Management, A Systems Approach to Planning, Scheduling, and Controlling, 10th edition, KERZNER 2. Principles of Construction management By: Roy Pitcher 3. Construction Planning, Programming and Control by Brian Cooke 4. Operations Management Creating Value Along the Supply Chain Russell - Chapter 9: Project management |
| A- Recommended books and references (scientific journals, reports ,.... | Library locations in some international universities. |
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| B- Electronic references, websites | Reputable websites. Libraries sites in some international universities. |

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