Course Description Form

1. Course Name:
Theory of Structure I
2. Course Code:
3. Semester / Year:
1st Semester / 3rd Stage
4. Description Preparation Date:
1/10/2023
5. Available Attendance Forms:
Attendance
6. Number of Credit Hours (Total) / Number of Units (Total)
Theoretical 60 hrs. Credits: 4
7. Course administrator's name (mention all, if more than one name)
Name: Qassim Ali Husain PhD Email: Qassim.ali@uowa.edu.iq
8. Course Objectives

Course Objectives	• Providing students with a general knowledge skill about analyzing statically determinate and indeterminate structures • Teaching the student, the skill of analyzing statically determinate structures (trusses, beams, and frame structures) and drawing the shear forces and bending moment diagrams for beams and frames. • Teaching the student, how to draw the influence line by different methods and recognizing him the purpose of using the influence line. • Teaching him to analyze statically indeterminate structures using approximate methods.

9. Teaching and Learning Strategies

Strategy	Explaining topics and directing continuous questions to students to continue their participation, using electronic means to clarify various topics, conducting surprise and monthly written tests, and giving homework for each topic that is explained.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4	Introduction	Introduction	Attendance	Discussion
2	4	Types of Structures and Loads	Identify the types of structures and loads	Attendance	Exam
4-3	8	Teaching the criteria of stability and determinacy of structures	Criteria of stability and determinacy of structures	Attendance	Exam
7-5	12	Finding reactions and drawing shear force and bending moments diagrams	Analysis of determinate structures	Attendance	Exam
11-8	16	Teaching the influence lines for statically determinate structures by different methods	Influence Lines for Statically Determinate Structures	Attendance	Exam
15-12	16	Teaching Approximate Analysis of Statically Indeterminate Structures by different methods	Approximate Analysis of Statically Indeterminate Structures	Attendance	Exam

11. Course Evaluation

Quizzes: 5%	Homework: 5%	Class activity: 5%	1st Exam: 12.5%	2nd Exam: 12.5%	Final Exam: 60%

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	• Structural Analysis by R. C. Hibbeler, Tenth edition
Main references (sources)	
Recommended books and references (scientific journals, reports…)	• Elementary theory of structures by Yuan-Yu Hsieh, second edition. Structural Analysis by Jack C. McCormac.
Electronic References, Websites	• https://www.youtube.com/watch?v=MJL1QPNtwGQ