**Republic of Iraq**

**Ministry of Higher Education and Scientific Research**
**Supervision and Scientific Evaluation Apparatus**


**University: Shatt Al-Arab**
**College: Engineering**
**Department: Civil Engineering**
**Stage: 4th stage**

# Course Weekly Outline

| Week No. | Theoretical | Experimental |
|---|---|---|
| 1 | Introduction: Steel structures, properties of structural steel. | |
| 2 | Introduction: Design specifications, design methods, standard steel sections | |
| 3 | Design of beams: Laterally supported beams (design for bending and shear), web bearing | |
| 4 | Design of beams: Laterally supported beams (design for bending and shear), web bearing | |
| 5 | Design of beams: Laterally unsupported beams (design for bending and shear), beams subjected to biaxial bending | |
| 6 | Design of beams: Laterally unsupported beams (design for bending and shear), beams subjected to biaxial bending | |
| 7 | Design of beams: Compound beams, deflection | |
| 8 | Design of beams: Compound beams, deflection | |
| 9 | Plate girders: Design for bending, design of web | |
| 10 | Plate girders: Design for bending, design of web | |
| 11 | Plate girder: Design of stiffeners | |
| 12 | Plate girder: Design of stiffeners | |
| 13 | Plate girder: Design of plate stiffeners | |
| 14 | Plate girder: Design of plate stiffeners | |
| 15 | Applications of PDE | |