



HASAN KALYONCU UNIVERSITY
Faculty of Engineering
Course Description Form

COURSE: Steel Structures					
CODE: CE354		SEMESTER: SPRING			
LANGUAGE: ENGLISH		TYPE: COMPULSORY			
PRE-REQUISITES: - CO-REQUISITES: -		THEORY	PRACTICAL	CREDIT	ECTS
WEEKLY HOURS: 3		3	0	3	4

CONTENT OF THE COURSE:

Mechanical behavior and material properties of structural steel, design of steel structures, allowable stress design approach, introduction to use of AISC-LRFD code. The concepts of structural steel including connections, tension members, compression members, beams and beam-columns, beams and girders as well as bolted-welded connections.

OBJECTIVE OF THE COURSE:

To enable students to learn the behavior of structural steel components and design it, such as, members and connections in two dimensional roof trusses, steel beams and frame structures.

WEEKLY SCHEDULE

Week	Topics
1	Introduction – Steel and properties
2	Tension members
3	Tension members
4	Tension members
5	Structural bolts
6	Structural bolts
7	Structural bolts
8	Mid-term
9	Welding
10	Welding
11	Compression members
12	Compression members
13	Beam Laterally supported
14	Beam Laterally supported

TEXTBOOK:

“Salmon CG, Johnson EJ, Malhas FA. Steel Structures, Design and Behavior. fifth Edition, USA: Pearson Prentice Hall. 2009.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
LO1	3	3	2	0	0	0	0	0	0	0	0
LO2	3	3	2	0	0	0	0	0	0	0	0
LO3	3	3	2	0	0	0	0	0	0	0	0
PO: Program Outcomes LO: Learning Outcomes Values: 0: None 1: Low 2: Medium 3: High											

INSTRUCTOR(S):

Asst.Prof.Dr. Dia Eddin
NASSANI

FORM PREPARATION DATE:

22.05.2019

LEARNING OUTCOMES OF THE COURSE:

LO1: Design of tension and compression members
LO2: Design of bolted and welded connections
LO3: Design of laterally supported beam

CONTRIBUTION OF THE COURSE TOWARDS PROVIDING VOCATIONAL

EDUCATION: The student understands the design principles of columns, beams and connections. Understands and applies how to use the Permissible Stress Design (ASD) and Load and Resistance Factor Design (LRFD) for the design of steel elements, in the light of standards.