The Hashemite University
Faculty of Engineering
Civil Engineering Program
Course Syllabus

Course Title:	**Steel Structures**	**Course Number:110401425**
Designation:	Compulsory	**Prerequisite(s): 110401315**
Instructor:	Dr. Bilal Abu Alfoul	**Instructor's e-mail:** bilala@hu.edu.jo

Office Hours:

Course Description (catalog): This is an introductory course to design steel structures using the LRFD method. Topics covered include tension members; compression members; beam design; serviceability requirements; beam-column design; bolted and welded connections.

Textbook(s) and/or Other Supplementary Materials:
McCormac and Nelson, Structural Steel Design – LRFD Method, Latest Edition, Prentice Hall.
Manual of Steel Construction, Latest Edition, American Institute of Steel Construction.

References:
Manual of Steel Construction, Latest Edition, American Institute of Steel Construction.

Major Topics Covered:

Topics	No. of Weeks	Contact hours*
Introduction to Structural Steel Design	1	3
Specifications, Loads and Methods of Design	1	3
Tension Members	3	9
Compression Members	3	9
Flexural Members	3	9
Beam- Columns	2	6
Connections	2	6
Total	**15**	**45**

*Contact hours include lectures, quizzes and exams

Specific Outcomes of Instruction (Course Learning Outcomes):
After completing the course, the student will be able to:

1. Analyze and design of tension members, compression members, flexural members, beam – columns and simple and eccentric connections in accordance with the latest AISC-LRFD Specification. (1, 2)

Student Outcomes (SO) Addressed by the Course:

#	Outcome Description	Contribution
	General Engineering Student Outcomes	
(1)	an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics	H (50)
(2)	an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors	H (50)
	H=High, **M**= Medium, **L**=Low	

Grading Plan:

1st Exam	30 Points	
2nd Exam	30 Points	
Final exam	40 Points	Will be announced by the registrar

General Notes: Beware of Plagiarism: copying and handing in for credit someone else's work
Any plagiarism case will result in an automatic 'F' for the course

Prepared by: Dr. Bilal Abu Alfoul **Date: October 1st 2022**