

## Course Syllabus

<b>Course Name:</b>	Special Topics in Civil Engineering	<b>Credits:</b>	3
<b>Course Code:</b>	CIE 418	<b>Pre-requisites:</b>	None
<b>Section:</b>	1		
<b>Instructor Name:</b>	Nabil Fares		
<b>Office:</b>	SD 309	<b>Ext:</b>	142
<b>Email:</b>	nabil.fares@aum.edu.lb		
<b>Office Hours:</b>	M. W. 10:00 am – 11:00 am		
<b>Course time:</b>	T. Th. 10:30am – 11:45 am	<b>Rm:</b>	SD 309
<b>Academic Year:</b>	2022-2023	<b>Semester:</b>	Fall

### Course Description:

This course focuses on providing students with an advanced level of understanding in one or more topics in Civil Engineering. The topics may vary from semester to semester depending on the needs and interests of the students.

### Learning Outcomes (Fall 2023):

- Do approximate analysis of beams and frames subject to vertical loadings.
- Do approximate analysis of beams and frames subject to lateral loadings.
- Calculate yield moment, plastic collapse moment and interaction diagram between axial load and plastic collapse moment.
- Calculate plastic collapse loads of some simple beams and frames.

### Required Textbook:

Instructor Notes

### Topics:

Date	Topic
Oct 27, Nov 1, 3, 8, 10	Approximate analysis for vertical loads
Nov 15, 17, 22, 24, 29	Approximate analysis for lateral loads
Dec 1, 6, 8, 13, 15, 20	Limit analysis for beams and frames
Dec 22	Exam 3 - oral

**Note:** Nov 22 (makeup at 3pm)

### Assessments:

Assessment	% of total	Date
Assignments	20%	Throughout semester
Exam 1	30%	November 17; 3:00pm – 4:00pm (written)
Exam 2	30%	December 8; 3:00pm – 4:00pm (written)
Exam 3	20%	December 22; 9:00am – 10:00am (oral)