

Basics of Statics and Dynamics

BSc

2018/19, spring semester

(Mon 10.15-12.00, KM78 – Tue 12.15-14.00, KM78 – #Fri 8.15-10.00, KM78)

Week	Date	Topic
1	04 Feb	Introduction, vector operations, rectilinear motion of a particle
	05 Feb	Kinematics of a particle: circular motion; motion along a curved path
2	11 Feb	Newton's laws, resultant of concurrent forces
	12 Feb	Kinetics of particles; theorems
	15 Feb	Moment of forces, couple; resultant of force systems
3	18 Feb	Resultant of distributed forces, centroid of 2D objects
	19 Feb	Centroid and kinetic variables of rigid bodies
4	25 Feb	Kinetics of rigid bodies
	26 Feb	Forces in 3D
	01 Mar	Constraints; reactions of simple structures
5	04 Mar	TEST 1: Forces and motion
	05 Mar	Reactions of simple structures
6	11 Mar	Reactions of compound structures
	12 Mar	Reactions of Gerber girders
	15 Mar	--- (<i>Public holiday</i>)
7	25 Mar	Reactions of three hinged frames, statical determinacy
	26 Mar	REPETITION OF TEST 1
8	01 Apr	Truss analysis I
	02 Apr	Truss analysis II
	05 Apr	Structures in 3D
9	08 Apr	TEST 2: Reactions of structures
	09 Apr	Internal forces
10	15 Apr	Internal force diagrams – basics
	16 Apr	Internal force diagrams of simply supported and cantilever beams
	19 Apr	--- (<i>Public holiday</i>)
11	22 Apr	--- (<i>Public holiday</i>)
	23 Apr	REPETITION OF TEST 2
12	29 Apr	Internal force diagrams of simply supported beams
	30 Apr	Internal force diagrams of Gerber beams (instead of 30 Apr)
	03 May	Internal force diagrams of frames
13	06 May	Internal force diagrams of compound frames
	07 May	TEST 3: Internal force diagrams
14	13 May	REPETITION OF TEST 3
	14 May	Internal forces in 3D
	17 May	2nd REPETITION / EXAMINATION

31 Jan 2019

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(lecturer)