

King Fahd University of Petroleum & Minerals
CIVIL ENGINEERING DEPARTMENT

CE 201 STATICS
First Semester 2002-2003 (021)

Text: Engineering Mechanics/Statics - R.C. Hibbeler (9th Ed.)
Prerequisite: PHYS 101

Instructor: Dr. Abdulrahman A. Khathlan
Phone: 2683
Office: 16-138

Office Hours:
Sat., Mon., Wed. (8-9 am)
Sat., Sun., Mon. (11-12 am)

			Lecture	
Date	Subject	Section	No.	
Sep.	14	Scalars & Vectors	2.1-2.2	1
	16	Vector Addition of Forces	2.3	2
	18	Addition of Coplanar Forces	2.4	3
<hr/>				
	21	Cartesian Vectors	2.5-2.6	4
	23	Position Vectors, Force along a Line	2.7-2.8	5
	25	Dot Product	2.9	6
<hr/>				
	28	Equilibrium of a Particle & Free-Body Diagrams	3.1-3.2	7
	30	Coplanar Force Systems	3.3	8
Oct.	2	Three-Dimensional Force Systems	3.4	9
<hr/>				
	5	Three-Dimensional Force Systems	3.4(cont.)	10
	7	Cross Product, Moment of a force	4.1-4.2	11
	9	Trans. of a Force & Principle of Moments	4.3-4.4	12
<hr/>				
	12	Moment about an axis	4.5	13
	14	Moment about an axis	4.5(cont.)	14
	16	Moment of a couple	4.6	15
<hr/>				
	19	Force and Couple Systems	4.7-4.8	16
	21	Distributed Loading	4.10	17
	23	Equilibrium of a Rigid Body	5.1-5.2	18
<hr/>				
	26	Equilibrium of a Rigid Body (2-D)	5.3	19
	28	Equilibrium of a Rigid Body (2-D), Two and Three-force Members	5.3 (cont.),5.4	20
	30	Equilibrium of a Rigid Body (3-D)	5.5-5.6	21
<hr/>				
Nov.	2	Equilibrium of a Rigid Body (3-D)	5.6 (cont.)	22
	4	Simple Trusses	6.1	23
	6	The Method of Joints	6.2	24
<hr/>				
	9	The Method of Joints	6.2 (cont.)	25
	11	Zero Force Members	6.3	26
	13	The Method of Sections	6.4	27

Date	Subject	Section	Lecture No.
Nov. 16	Frames and Machines	6.6	28
18	Frames and Machines	6.6 (cont.)	29
20	Frames and Machines	6.6 (cont.)	30
----- Eid al-Fitr Holiday -----			
Dec. 14	Internal Forces (2-D)	7.1	31
16	Internal Forces (3-D)	7.1 (cont.)	32
18	Shear and Moment Equations & Diagrams	7.2	33
21	Shear and Moment Equations & Diagrams	7.2 (cont.)	34
23	Shear and Moment Equations & Diagrams	7.2 (cont.)	35
25	Shear and Moment Equations & Diagrams	7.2 (cont.)	36
28	Dry Friction	8.1	37
30	Problems Involving Dry Friction	8.2	38
Jan. 1	Problems Involving Dry Friction	8.2 (cont.)	39
4	Problems Involving Dry Friction	8.2 (cont.)	40
6	Center of Gravity & Centroid	9.1-9.2	41
8	C. G. for Composite Bodies	9.3	42
11	C. G. for Composite Bodies	9.3 (cont.)	43
13	Moment of Inertia for Areas, Parallel-Axis Theorem	10.1-10.2	44
15	Moment of Inertia for Composite Areas	10.5	45

Exam Dates:

EXAM # 1: Wednesday, October 16, 2002 at 7:00-9:30 p.m.

EXAM # 2: Monday, November 18, 2002 at 8:30-11:00 p.m.

Grade Distribution:

Homework and attendance	=	15%
Quizzes (In-Class)	=	10%
First Major Exam	=	20%
Second Major Exam	=	25%
Final Exam	=	30%
Total		100

- Note:
- The University regulations regarding excessive absences will be strictly adhered to in this course. (9 unexcused absences → DN grade)
 - Each assignment **MUST** be submitted according to the standard format given to you.
 - Late submission of assignments is **NOT** accepted.