## GENERAL ORGANIZATION FOR TECHNICAL EDUCATION AND VOCATIONAL TRAINING

# RIYADH COLLEGE OF TECHNOLOG

## MECHANICAL TECHNOLOGY DEPARTMENT

## **ME-392**: Mechanics

Fall 1427/1428 (27-2)

Instructor	Office	Phone	Email
Dr. Al-Abduljabbar	15-S-44	4, Ext 3007	Metech27@gmail.com

Catalogue Description: 3(3-0-0) Contact hrs: 3 Pre-requisites: PHYS 302, MATH 301

## **Choose the lecture topics that you want to learn in this course**

- 1. *Introduction:* Units, Basic mathematical requirements (Must)
- 2. Statics of Particles: Force Analysis, equations of motion: Newton's 1<sup>st</sup> Law. ( )
- 3. Statics of Rigid Bodies: Force Analysis, equations of motion: Newton's 1st Law for rigid body. ( )
- **4.** *Kinematics of Particles:* Displacement, velocity, acceleration etc... Newton's 2<sup>nd</sup> Law for particles. ( )
- 5. *Kinematics of Rigid Bodies:* Displacement, velocity, acceleration etc... Newton's 2<sup>nd</sup> Law for rigid body. ( )
- 6. Kinetics of Particles: dynamic forces, acceleration and momentum for rigid body
- 7. Kinetics of Rigid Bodies: dynamic forces, acceleration and momentum for rigid body
- 8. Shear moment Diagrams: ( )

#### **Attendance**

Attendance will be checked at the beginning of each lecture. **Late coming** is strictly **not allowed** as this disturbs students and instructor. Excuses for absence should be approved by the **Deanship of student affairs** and submitted to the instructor within one week following the last day of absence. University regulations will be followed for students exceeding the maximum number of unexcused absences. In addition, 0.5% will be deducted for each unexcused absence.

#### **Homeworks**

All homework problems assigned during a given week are due in class on the following **Monday** unless otherwise stated. **LATE** home works **will not be accepted**.

#### **Ouizzes**

Five quizzes will be scheduled during the semester. No make-up quizzes will be conducted.

### **Major Exam**

One major exam is planned after the 6<sup>th</sup> week;

## **GRADING SYSTEM**

10 %	Class work & Attendance	To be assigned	
10 %	Homework	No late homeworks	
10 %	Quizzes	No make up quizzes	
25%	Major Exam	March 27, 2006, 8:00 PM	
45 %	Final Exam	Scheduled by the registrar	