

	National University of Sciences and Technology	
	Course Description	
Course Title Design of Mechanisms	Course Code ME 829	Credit Hours 3 – 0

Textbook:

- “Mechanism Design: Analysis and Synthesis” by Arthur G. Erdman and George N. Sandor
- “Mechanism Design (CRC Mechanical Engineering)” by Lung-wen Tsai

Course Objective:

- Specific concepts, methodologies, tools and techniques for effective design of mechanisms shall be taught to the students.

Course Outline:

- The course is designed to explain principles necessary for the development of appropriate design processes for mechanical components. A brief introduction to the kinematic of mechanisms is provided. The course covers introduction of machine component design, structural analysis of machine elements for the intended job, selection of rolling element bearings, introduction to lubrication and associated mechanisms, sealing capabilities, connections, the design of various gears, rotating members, cams, dampers, casings and bolted structures and design of manipulators. The kinematic and dynamics of multi-degree-of-freedom mechanical systems are also covered

ASSESSMENTS

Description	Percentage Weightage (%)
Assignments	05-10%
Quizzes	10-15%
Mid Semester Exams	30-40%
End Semester Exam	40-50%