The mission of the Department of Industrial and Information Management is to Cultivate quality professionals with enthusiasm and global perspectives.

General Program Learning Goals (goals covered by this course are indicated):

|   | 1 Graduates should be able to communicate effectively verbally and in writing.  
|   | 2 Graduates should solve strategic problems with a creative and innovative approach.  
|   | 3 Graduates should demonstrate leadership skills demanded of a person in authority.  
|   | 4 Graduates should possess a global economic and management perspective.  
|   | 5 Graduates should possess the necessary skills and values demanded of a true professional.  

Instructor: Victor B. Kreng, Ph.D.  Room 61317  Tel: x53145


Grading:  
Mid Term Exam X 2…………….. 40%  
Class Participation and discussion…………… 10%  
Case Presentation……………………….. 20%  
Final Exam…………………………… 30%

All the reports and assignment should be hand in with A4 or letter size papers.  No sloppy or late assignment is accepted.

Course objectives:
Treating such contemporary design and development issues as identifying customer needs, design for manufacturing, prototyping, and industrial design, this class presents in a clear and detailed way a set of product development techniques aimed at bringing together the marketing, design, and manufacturing functions of the enterprise. The integrative methods facilitate problem solving and decision making among people with different disciplinary perspectives, reflecting the current industry toward designing and developing products in cross-functional teams.

Introduction  
Development Processes and Organizations  
Product Planning  
Identifying Customer Needs  
Product Specifications  
Concept Generation  
Concept Selection
Concept Testing  
Product Architecture  
Industrial Design  
Design for Manufacturing  
Prototyping  
Robust Design  
Patents and Intellectual Property  
Product Development Economics  
Managing Projects

**Grading Policy**:  
Midterms 40%  
Class Participation 10%  
Final 30%  
Case Presentation 20%

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