

ENGR 5332/MARK 5375 – NEW PRODUCT DEVELOPMENT

Spring Semester 2003

Thursdays, 5:30 – 8:10 pm, ENG 128

Instructor: Thomas Crippen, PhD (Office: ENG 156, 903-566-7362, tcrippen@mail.uttyl.edu)

Text: *Product Design and Development*, 2nd ed, Ulrich and Eppinger, McGraw-Hill, 2000

Date	Wk	Topics	Reading	Presentations/ Deliverables
1/16	1	Introduction, Strategic Management	U/E 1, Cooper 1	
1/23	2	Development Processes and Organizations	U/E 2; Cooper 2 - 5; MDF 7; DPH 1,3,4,8,9,13	Project proposals
1/30	3	Development Processes (cont.), Product Planning	U/E 3; Cooper 6	Project preferences by 1/27; Cooper 6
2/6	4	Product Planning (cont.)	Cooper <i>et al</i> (suggested)	
2/13	5	Identifying Customer Needs	U/E 4; MDF 9; DPH 5	MDF 9; DPH 5
2/20	6	Product Specifications	U/E 5; MDF 9; DPH 5	
2/27	7	Concept Generation, Selection, and Testing	U/E 6 - 8; MDF 9,10	Team assignment
3/6	8	Project Management and Control	U/E 14; MDF 5,11; DPH 9,10,11	Team assignment; MDF 5; DPH 9; MDF 11, DPH 11 Gate 2 Presentation
3/20	9	Gate 3 Presentation; Product Development Economics	U/E 13; MDF 2,11; DPH 2,12	Team assignment; MDF 2, DPH 2 Gate 3 Presentation
3/27	10	Product Development Economics (cont.), Product Architecture	U/E 9; MDF 8	
4/3	11	Industrial Design, DFX	U/E 10,11	Team assignment Design Review
4/10	12	Prototyping	U/E 12; MDF 3,4,10,12; DPH 9	MDF 3; MDF 4
4/17	13	Managing Project Risk, FMEA	U/E 14; MDF 12; DPH 6,12	Team assignment; Gate 4 Presentation
4/24	14	Disruptive Technologies	Christensen (suggested)	Alpha prototype
5/1	15	Gate 5 Project Presentation		Final presentation (part of team assignment)
		Final Exam?		

Reading on Reserve

1. *Product Leadership: Creating and Launching Superior New Products*, Robert Cooper, Perseus, 2000 (Cooper)
2. *Managing the Design Factory*, Donald Reinertsen, Free Press, 1997 (MDF)
3. *Developing Products in Half the Time*, 2nd ed., Preston Smith and Donald Reinertsen, Wiley, 1998 (DPH)

Suggested Supplementary Reading

1. *The Innovator's Dilemma*, Clayton M. Christensen, HarperBusiness, 2000
2. *Portfolio Management for New Products*, Robert Cooper, Scott Edgett, Elko Kleinschmidt, Perseus, 1998
3. *Leading Product Development*, Steven Wheelwright, Kim Clark, Free Press, 1995
4. *Third Generation R&D*; Philip A. Roussel, Kamal N. Saad, Tamara J. Erickson; Harvard Business School Press, 1991

5. *The PDMA Handbook of New Product Development*, edited by Milton D. Rosenau Jr., Abbie Griffin, George Castellion, and Ned Anshuetz; Wiley, 1996

Course Grading

%	Category
10	Individual Project Proposal and Presentation
25	Assigned Presentations and Class Participation
35	Team's Project-Related Assignments
30	Team's Final Presentation

(Course page URL: <http://www.eng.uttyl.edu/usr/tcrippen/home/engr5340page.html>)