Course Syllabus

This course in Interdisciplinary Product Development is team-taught by faculty members from three colleges: Architecture & the Arts, Business, and Engineering. Teams of six or seven students from industrial design, marketing, and engineering work together to identify and develop opportunities for new products in a broad market arena defined by a corporate client. The year-long design process of identifying and developing a new product opportunity will culminate in the creation of form and functional prototypes. Each team will make four presentations of course progress to management of the client company.

The corporate client for 2003-04 is Rehkemper, Inc. They have provided an interesting and challenging assignment, as well as significant financial support for the course. They will also be sharing proprietary information and knowledge with us. All students will be required to sign a non-disclosure agreement and an intellectual property agreement that gives the client ownership of the work product of student teams. This arrangement has been approved by the University.

Meetings:
Thursdays 2:30-5:00  315 BSB
After week four, we plan to meet 2:30-4:30 in BSB, with team meetings 4:30-5:30 in 3316 AAB.

Faculty:
Prof. Stephen Melamed  Prof. Albert L. Page  Prof. Michael J. Scott
Art and Design  Marketing  Mechanical & Industrial Engineering
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Course web site: http://design.me.uic.edu/IPD

Teams:
Each team will consist of 2 or 3 students from each of the three disciplines – business, design, and engineering. Teams will be selected by the faculty and announced in the fourth class. Please see the accompanying handout on team formation.

Grading policies:
There are no tests. Grades will be assigned to individuals based on faculty assessment of performance on the group project and on student evaluations of team member performance. Please see the accompanying handout on grading.

Topics, week by week:

1. Aug. 28
   Introduction:
   - process overview
   - corporate sponsorship, administrative details
   - course mechanics, teams, grading
   - problem-based New Product Development and cross-functionality
   Assignment 1: Top ten interesting facts about air motors. (Due Sep. 11)
   Discipline skills assignments. (Due Sep. 4)

2. Sep. 4
   Introduction to Rehkemper at Rehkemper. Class meets at 1300 W. Washington.
   Introduction to the Thinkubator.
   Skills assignments due.
3. Sep. 11
Thinkubator: Ideation on new product areas.
Assignment 1 due.
Assignment 2: Background research on current product application areas. (Due Sep. 18)

4. Sep. 18
Team formation, product area categories
Assignment 2 due.
Team kick-off get-together.
Assignment 3: Motor specifications. (Due Oct. 2)
Assignment 4: Market size. (Due Oct. 2)
Assignment 5: First presentation. (Due Oct. 23)

5. Sep. 25
Air motors, project management.

6. Oct. 2
Project management software.
Location TBA.
Assignments 3 and 4 due.

7. Oct. 9
Exploration – Early and Often, Rapid prototyping.
Also: Special guest speaker.
Assignment 4 due.

8. Oct. 16
Presentation rehearsals.

9. Oct. 23
Mid-term presentations.
Assignment 5 due.

10. Oct. 30
Team-building.
Assignment 6: End-of-semester presentations. (Due Dec. 4)

11. Nov. 6
Design reviews: all teams meet with faculty.

12. Nov. 13
Introduction to user research.

13. Nov. 20
Look ahead to spring semester.
Each team must make an appointment for a dry run of their end-of-semester presentation, preferably for MTW of Thanksgiving week.

14. Thanksgiving Week, no class meeting, dry run of presentation.

15. Dec. 4
End-of-semester presentations.
Report on research.
What is the problem you intend to solve?

And on to the Second Semester...