UIC IPD

Stephen Melamed, Industrial Design, College of Architecture, Design and the Arts
Michael J. Scott, Engineering, College of Engineering
Jelena Spanjol, Marketing, College of Business Administration
Donald Bergh, Graphic Design, College of Architecture, Design and the Arts

University of Illinois at Chicago

Cricket Wireless
Fall Semester, 2012

Interdisciplinary Product Development

Overview and Objectives

This course in Interdisciplinary Product Development is team-taught by faculty members from three colleges: Architecture+Arts, Business Administration, and Engineering. In addition, there will be several other faculty providing valuable guest lectures on specific areas of expertise. Teams of students from graphic design, industrial design, marketing, and engineering work together to identify and develop opportunities for new products/systems/services in a broad market arena defined by a corporate client/class sponsor.

Our objective is to immerse interdisciplinary student teams in the year-long (2 semesters—Fall 2012 & Spring 2013) design process of identifying and developing a new opportunity, which will culminate in the creation of prototypes and corresponding project documentation. Each team will make four major presentations of course progress to top management of the sponsor company.

The corporate sponsor/client for 2012—2013 is Cricket Wireless. 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 the class. All students will be required to sign a Confidentiality Non-Disclosure Agreement (NDA) and an Intellectual Property Agreement (IPA) that gives the client ownership of the work product of all student teams and faculty. This arrangement has been approved by the University Legal Department as well as the Deans of the three colleges.

Class Meetings

Tuesdays 2:00-5:00 pm
UIC Innovation Center, 1240 W. Harrison Street (Unless announced otherwise)
Note: Team meetings with faculty may go until 6:00 pm.

Faculty
Office Hours: By appointment

Stephen Melamed, IDSA
Art+Design; Industrial Design
106 JH
312.996.3337
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Business Administration; Marketing
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Mechanical & Industrial Engineering
2019 ERF
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Art+Design; Graphic Design
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Course Web Site

http://www.ipd.uic.edu/IPD

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AD 421 | AD 411 | ME 445 | MKTG 577

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Welcome!

Date	Week	
August 28	**1**	**Week-by-week topics (subject to change. . .)**

Course Introduction—general overview, corporate sponsorship, overall process:
Research, Ideation, Prototyping overviews, administrative details, skills assessments, course mechanics, grading policy, attendance policy and team formation process.

• Myers/Briggs assessment
• Legal Agreements: NDA / IP
• Tour of the Innovation Center / IPD home turf
• Marshmallow Challenge
• Team and Self-Evaluations
• Week 2 logistics
• In class exercise: Design Thinking
• Student photos/head shots (IPD class website)

Assignment 0: Administrative class requirements, sign up on web site (ASAP)
(Including: Project Lab Orientation, Andy Graham); Certification in A+A

Assignment 1: General background research on the industry, brand, product categories, channels, mark-ups, etc.

Assignment 2: Discipline specific skills assessments (due Monday, September 3, at noon)

Assignment 3: View "Objectified" (see link through BlackBoard) if you have not already done so.

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Date	Week	
September 4	2	• Assignment 1 due • Introduction to Cricket Wireless Corporation • Guest lecture: Craig Thole • Introduction to Cricket Problem Statements • Teams established & problem statements selected • Preview: IPD in a day • Off-site visit to corporate sponsor– Cricket Wireless Corporate Store; 1215 North Milwaukee, Chicago. Class will meet at IC and head together to the Cricket Store **Assignment 4:** Team contract (due in week 3) **Assignment 5:** Team name / team logo (due in week 3) • Team building kickoff event at (location TBA)
September 11	3	IPD in a day: Mobile team rooms • Research techniques and methodologies used to inform new product development • VOC (Voice-of-the-Customer) / Human-Centered Design Research (lectures)
September 18	4	• Board Critique activity & temporary board ready for use • Mapping/competitive landscape (lecture) • Activity to fill board • Photo of board/upload (jpg) **Assignment 6:** Midterm deliverables (due in week 8) **Assignment 7:** Project documentation (on-going; due in week 15) **Assignment 8:** Mapping assignment (due in week 5)
September 25	5	Primary Research: • Observation • Interviews **Assignment 9:** Primary research (due in week 6)

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Date	Week	
October 2	**6**	Analysis/Synthesis of research • Objective: what additional primary research is needed? what prototypes are needed to conduct additional primary research? • Prototyping I **Assignment 10: Synthesis** (due in week 8)
October 9	**7**	Midterm Rehearsals (dry run) and coaching
October 16	**8**	**Midterm Board Presentations to Cricket management and IPD faculty at UIC Innovation Center**
October 23	**9**	Ideation 1 • Analogies • Idea Cards • Lego Serious Play Activity **Assignment 11: Ideation 1** (due in week 10) **Assignment 12: Final Deliverables** (due in week 15)
October 30	**10**	Ideation 2 Screening **Assignment 13: Ideation 2** (due in week 11)
November 6	**11**	Personas & Scenarios Prototyping 2
November 13	**12**	Working session in class
November 20	**13**	Working session in class
November 27	**14**	Dry runs for final, coaching by faculty
December 4	**15**	**Final presentations to Cricket management and IPD Faculty** • Present ideas identified and articulated: Top 3 Idea Cards, comparative analysis / Top 1 Idea Card • IPD first semester / annual year-end holiday banquet, location TBD
December 11	**16**	Finals week, no class **Winter Break—enjoy** **See you Spring Semester**

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Course credit hours and prerequisites

AD 421 Credit hours: 4

Prerequisites: Commitment to both Fall 2012 & Spring 2013 semesters
AD 411 Credit hours: 4
Prerequisites: Commitment to both Fall 2012 & Spring 2013 semesters

ME 445 Credit hours: 4
Prerequisites: Commitment to both Fall 2012 & Spring 2013 semesters

MKTG 577 Credit hours: 4
Prerequisites: MKTG 500 and commitment to both Fall 2012 & Spring 2013 semesters

Grading policy

There are no tests in IPD. Grades will be assigned to individuals based on faculty assessment of performance on the group project (and its various components), student evaluations of team member performance (effort and contribution), and student attendance and participation.

Group Performance
Students will be graded by the faculty on their overall performance on the group project. Grading based on projects is always more difficult than grading based on exams. The IPD Faculty shall follow several principles in the grading:

1. Process will be emphasized, rather than outcome. While everyone delights in inspiring results (and usually gives them high marks), the primary goal is that students learn how to approach the product development process.

2. The IPD faculty will provide regular feedback throughout the semester. There are two types of feedback faculty will provide to teams: 1) written feedback, in the form of memos (a minimum of two feedback memos per semester), and 2) verbal feedback, in the form of continuous discussions around the team's progress.

3. The IPD faculty cares about the quality of your work on the project itself, the way in which you work within a multi-disciplinary group, and the documentation and presentation of your team's work product.

4. The IPD faculty's primary concern is that all team members have meaningful tasks, and that students deliver on these tasks for the team. This is harder than it sounds, and we ask students to monitor it in two ways. First, teams will keep a list of tasks assigned to members and determine, on a weekly basis and as a team, whether these tasks were fulfilled, culminating with a brief weekly report submitted to the faculty. Failure to complete tasks appropriately will negatively impact grades. Second, each student will be asked to candidly evaluate your team members. A standard form (see Appendix A) will be used several times throughout the semester.

5. Your presence at class meetings and punctual arrival to class is important to the execution of the entire project, as well as to your team. Unexcused absences and late arrivals to class will be penalized with grade demotions and may result in a failing grade. If you will be unable to attend class for good reason, you must inform the faculty in advance (e-mail is most preferable), stating the reason for your absence, in order to request and receive an excused absence.

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Prof. Scott	mjscott@uic.edu	312.996.4354
Prof. Spanjol	spanjol@uic.edu	312.355.4953
Adjunct Prof. Bergh	dbergh@uic.edu	312.731.9038

6. Breakdown of gradable portions of the class (see below)... these categories will be judged by the faculty based on their observation of work throughout the term and peer evaluations.

70% of the grade is for group performance, allocated as follows:

• Project work and archival documentation: 40%
• Presentations to the course sponsor/client 30%

30% of the grade is for individual performance, allocated as follows:
• Individual contribution to project content: 20%
• Individual contribution to group functionality: 10%

Scholastic Dishonesty
It is the responsibility of the students and instructors to help maintain scholastic integrity at the university by refusing to participate in or tolerate scholastic dishonesty. For more information please refer to the categories of scholastic dishonesty in the student handbook (see http://www.uic.edu/ucat/catalog/GR.shtml#qa for more information). If it is determined that scholastic dishonesty is taking place, we will follow the procedures specified by the university and take the appropriate disciplinary action (a minimum of which will be a zero on the work turned in).

Note: Plagiarism consists of passing off as one's own the ideas, words, writings, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you have permission from that person.

For a complete description of just causes for discipline, disciplinary procedures, and sanctions, see the pamphlet "Student Disciplinary Procedure of the Senate Committee on Student Discipline," available from the Office of the Dean of Students, SSB, Suite 3030, 1200 W. Harrison St., M/C 318, and at http://www.uic.edu/depts/dos/studentconduct.html.

Special Accommodations
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Office for Access and Equity (M/C 602), 717 Marshfield Avenue Building, 809 South Marshfield Avenue, Chicago, IL 60612-7207, (312) 996-8670.

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General information

Religious holidays
Please refer to the official academic calendar and policies regarding religious holidays, which can be found on the website of UIC's Office for Access and Equity (http://www.uic.edu/depts/oae/docs/ReligiousHolidaysFY20112013.pdf).

Withdrawal Policy
The last day to complete late registration; last day to add or drop a course or make section changes is September 7, 2012. We strongly encourage students to drop IPD (if absolutely deemed necessary) in the first week of classes, to allow for the admission of students that have been wait-listed.

Administrative Policy
Requests for grade changes should be submitted in writing and will be considered only if the instructor made a procedural or administrative error.
We will only assign an incomplete grade to students that have medical documentation showing that they were unable to complete more than 50% of the course assignments.

Team Evaluation Form

Evaluation
At times throughout the year, each student will be asked to evaluate the contribution made to the project by each member of the team. As an individual, you will be asked to evaluate yourself and your teammates in a fair and unbiased manner for both contribution to the project as well as effort during a specific time period. The faculty will use the provided aggregate responses to help to determine grades. Individual responses are always kept confidential. In addition, inconsistent responses among different team members may be an indicator that leads the faculty to intervene to address team issues. Please note that the number you assign to your own performance should not affect anyone else's grade, including your own.

Contribution
You are given 100 points to assign to the team in accordance with the value of the contribution made to the overall project by the individual team members. You may think of this as the percentage that each student contributed to the project up to that point (of development). Include yourself, make sure it all adds up to 100, and remember that effort is assessed separately.

Effort
Effort to the project is assessed relatively. You must assign yourself a 10 on the effort scale. If another team member expended twice the effort you did, give them a 20, if they expended half the effort, a 5, and so on. Unlike the contribution scale, there is no total specified sum for the efforts of all team members. Please note that it is possible for a team member to expend a great deal of effort without contributing much that is of importance to a project, or for a team member to make a significant contribution without exerting a great deal of effort.

Submission
All team-evaluations and self-evaluations are to be submitted electronically using a personalized web-based form hosted on the IPD class web site - http://www.ipd.uic.edu/IPD

The evaluation forms will only be available for a specified time window when evaluations are requested. This activity will take place at four intervals during the academic year generally associated with Midterms and Finals.