Experiential Cross-Disciplinary Learning: Integrated Product Development (IPD)

Innovation Description

IPD recreates the competitive environment that real businesses face every day. In 12 short weeks, interdisciplinary teams of students from the Schools of Business, Engineering, Architecture, and Art & Design develop fully functional, customer-ready products and subject them to assessment by voters in simulated markets. IPD is the only course in the country to juxtapose these requirements, and it has been repeatedly identified by Business Week magazine as one of the top design courses in the world.

Each team works together on the market research, design, manufacturing, and costing of their product, as well as graphic identity, websites, and trade show presentations. Last year brought 1,314 web-based votes, while the physical trade show boasted 302 attendees who reviewed the products and cast ballots for their favorite. As in the real world of business and design, student grades reflect the overall profitability that they achieved at the two trade shows.

http://www.tauber.umich.edu/News%20and%20Events/IPD/2008/index.htm

Student Comments

"While nothing can truly prepare you for starting and running a business, U of M's Integrated Product Development course is the best college course for molding a budding entrepreneur's mind."

"I think that IPD more completely prepares a student to do value-added work than any other course I've taken."

"I was completely immersed in the class from day one because of the challenge presented, the approximation of a real-world design experience, and the excitement I felt for learning something so different from what I was learning in my other classes. I was personally so invested in the course that I think I worked harder and more diligently in this class than I did in all my other courses combined."

"I can say (in hindsight), that IPD was the most holistic course offered within the business school or school of engineering. It effectively combined the rigor, discipline and methodology required to develop products, while representing the real-life tension and organizational factors that impact a firm's ability to deliver winning products. By accurately representing the product development process, from brainstorming and concept creation to planning, pricing and execution, IPD allowed me to see what a career in developing products would look like."

Examples of Teaching Innovation

Modest correlation (.63) between web and physical trade show shares, significant at 7%

Each team created a fully functional product and website, and competed in virtual and physical trade shows.

The Hygenius drew 26% of the web market share.