

# IPRO 333 PROJECT PLAN

## 1. Project Objective

- This project strives to deliver scientific and tangible modules targeted at an eighth grade level.
- Modules will introduce material supplementary to the science curriculum.
- Interactive modules will engage users, and ultimately raise MSI attendance
- Modules will reflect the results of user testing, research, and analysis.
- Modules will supplement preexisting or future exhibits at MSI

## 2. Background

- This project is sponsored by the Museum of Science and Industry (Chicago, Illinois).
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- The Museum of Science and Industry (MSI) contacted Illinois Institute of Technology's Interprofessional Projects program about enlisting a student team to develop content for its website (<http://www.msichicago.org>) over the course of two semesters (Fall 2007 and Spring 2008). The team has been tasked with further developing three interactive modules for the website. These modules are intended to raise scientific inquiry and support pre-existing scientific knowledge.
- There are three major areas of concentration for each group. Programmers, designers and content managers will aid in the development of each module.
- Programmers will need a proficient understanding of Flash, ~~and the ability to utilize a mySQL\_ and database~~ ~~and code in .NET coding.~~
- Designers will be responsible for creating educationally accurate and visually appealing images.
- Content managers will be required to relay clear and concise content that reflects age-appropriate and scientifically accurate curricula.
- MSI is currently developing a more modern and interactive website. The IPRO team will aid the museum by adding Flash modules to further interactivity. MSI provided the team with examples of successful preexisting scientific websites. These include: the Exploratorium (<http://www.exploratorium.edu>) and the Franklin Institute (<http://www.fi.edu>). These websites, and others, have been evaluated by the IPRO team and judged by their success in qualitative learning.
- The museum's goal is to incorporate emerging technologies, ultimately transforming the "brochure like" website into a more engaging attraction for potential museum visitors.
- Finalized developed modules will be incorporated into MSI's website re-launch in 2008.

## 3. Methodology/Brainstorm/Work Breakdown Structure

Problem 1: Incorporating new members

Solution:

- The first two weeks will be spent expanding on previous research and integrating new members.
- Programmers will have to explain coding, content managers will direct research, and designers will explain image construction.
- New ideas will be discussed with new members, and modules will be updated to reflect brainstorming sessions.

Problem 2: Improving preexisting modules

Solution:

- Additional research and design elements will be incorporated into each module.
- Storyboards will be made for each module to help guide the module process.
- Each storyboard will focus on navigation, graphics and content.

Problem 3: Ensuring that modules stay interesting and educational

Solution:

- Paper prototypes will be used to test at local schools.
- After modules are running, they will be tested for accuracy, fluidity and visual appeal.
- Feedback will be accessed [assessed?], and incorporated into each module.

Problem 4: Completing IPRO deliverables

Solution:

- Each team member was assigned a deliverable the second day of class.
- That team member is responsible for the deliverable and or any supplementing workshop that might coincide with that specific deliverable.
- Once the deliverable is completed, the author will upload a draft to iGROUPS two days prior to the due date.
- Once the draft is uploaded, the team members responsible for the next deliverable will also be responsible for editing the previous one.

#### 4. **Expected Results:**

*Upon completion, the modules will be implemented in the Museum of Science and Industry website. Upon completion, students visiting the website will learn different scientific topics through the interactive modules we have created.*

- Now that the research part of our project has been completed, there will be at least two more user tests conducted. For the paper prototype user test we'll be creating paper boards of our modules with movable elements. Modules will be tested for navigation, graphics and content. The second user testing will take place later when the modules are in working condition. Representative 8<sup>th</sup> grade students will again test the modules on the computer. Reactions and feedbacks will be noted and final modifications and polishing will take place on modules.
- Research and testing will give us definitive module ideas which we can develop further.
- Once all the tasks are completed based on the project plan, we'll have working modules which then will be incorporated into the Museum of Science and Industry website.
- Upon completion, the project will have a successfully implemented project plan as well as an ethical project. Additionally, the project history documentation will be available for future studies. Others will understand the project through presentations and posters.
- As each IPRO deliverable is met, the client will receive information on our progress. The successful project will benefit the client. ~~?? DO YOU NEED THIS LAS.~~

#### 5. **Project Budget**

This project will make significant use of the Internet as a resource for information and references in the creation and development of digital materials and educational objectives. As our final client deliverable is a digital file, our few expenses are projected to be as follows:

<b>Date</b>	<b>Item</b>	<b>Cost (Estimated for future dates)</b>
8-30-07	Visit to MSI (Parking)	\$24

10-12-07	Concept Testing Materials	\$75
11-25-07	IPRO Day Materials	\$150

## 6. Schedule of Tasks and Milestone Events

Gantt chart attached separately. [Click Here](#)

<http://www.google.com/search?q=ist+kinder+setzen...er+essen%3F&ie=utf-8&oe=utf-8&aq=t&rls=com.ubuntu:en-US:official&client=firefox-a>

## 7. Individual Team Member Assignments

### Team Member Information

Team Member Name	Major	Relevant Skills
Patrick Aubin	CS	Web Development
Joe Carden	MMAE	
Suein Cho	ARCH	Graphics
Andrew Hofland	PSYC	Graphics
Marc Huh	BCPS	
Joseph Kaiser	CS	
Kristina Lakiotis	CS	Web Development
Susan Mallgrave	HUM	Content
Elizabeth Moss	PSYC	
Joseph Nicorata	ECE	Flash/Web Development
Janusz Nosek	CS	Web <del>Development</del> Development
Daniel Price	<u>CSPE/CS</u>	Web Development
Laura Rodriguez	ECE	Web Development
Monica Smith	HUM	Content
Eri Suzuki	ARCH	Graphics

### Subgroups

*Each subteam is responsible for their individual module. The energy team will create an interactive module that will introduce players to the issues of sustainable energy. The genetics team will produce a module aimed at teaching basic genetic principles. The mechanics team will design a module based on a series of puzzles based on basic mechanics and simple physics.*

### **Energy Team**

Team Leader: Monica Smith

Content Manager: Susan Mallgrave. Monica Smith

Designer: Andrew Hofland

Developer: Joseph Nicorata

Designer/Developer: Laura Rodriguez

### **Genetics Team**

*Team Leader: Daniel Price*

Content Manager: Elizabeth Moss

Designer: Eri Suzuki

Developer: Daniel Price, Kristina Lakiotis

### **Machines Team**

*Team Leader: Mark Huh*

Content Manager: Marc Huh, Joe Carden

Designer: Joseph Kaiser

Developer: Patrick Aubin, Janusz Nosek

## **8. Designation of Roles**

### Meeting Roles

Agenda Maker: Sue I Cho

Minute Taker: Elizabeth Moss

Time Keeper: Monica Smith

Master Schedule Maker: Sue I Cho

Igroups Organizer: Andrew Hofland

### Deliverable Roles

Project Plan: Monica Smith

Code of Ethics: Kristina Lakiotis, Joe Carden

Midterm/ Final Reports: Susan Mallgrave, Joseph Kaiser

Midterm Presentation/Slides: Joe Nicorata and other speakers to be determined.

User Testing: Daniel Price, Marc Huh, Laura Rodriguez

Meeting Minutes: Elizabeth Moss

Project Documentation: Eri Suzuki

Website: Andrew Hofland

Posters/Brochures: Patrick Aubin, Janusz Nosek