Illinois Institute of Technology

IIT Sustainability Branding



Project Plan IPRO 311

Advisor: Nancy Hamill Governale Additional Assistance Provided by: Ray DeBoth & Rae Mindock

IPRO 311's mission is to make the campus a more sustainable institution with green technologies and more efficient uses of its resources.

1. Team Information

Contact List						
Name	E-mail	Phone #				
Alejandro Aguilar	aaguila2@iit.edu					
Richard Alexander	ralexan2@iit.edu					
Oladipo Animashaun	oanimash@iit.edu					
Mark Chauhan	mchauha2@iit.edu					
Seth Ellsworth	ellsset@iit.edu					
Crystal Glover	cglover1@iit.edu					
Kevin Krupp	kkrupp@iit.edu					
Nim Patel	npate45@iit.edu					
Colin Scheer	cscheer@iit.edu					
Nader Tadros	ntadros@iit.edu					

Name: Alejandro Aguilar

Year: 3rd

Major: Architectural Engineering

Experience/Skills/Strengths: Adobe Photoshop, Drafting, Drawing, Communications (public

speaking, written reports, listening, etc.), Resourcefulness, Work Ethic

Name: Richard Alexander

Year: 4th

Major: Computer Science

Experience/Skills/Strengths: Web Development, Student Organization leadership, Adobe Flash

Name: Oladipo Animashaun

Year: 4th

Major: Architecture

Experience/Skills/Strengths: AutoCAD, 3ds Max, Adobe Illustrator, Adobe Photoshop, Model

making, Carpentry, Experienced team member of an architecture firm

Name: Mark Chauhan

Year: 4th

Major: Mechanical Engineering w/ Minor in Materials Science Eng.

Experience/Skills/Strengths: AutoCAD, Pro-Engineer, Windows Office Suite, SPSS Data Analysis

Software, graphical presentation, analytical, teamwork, goal-oriented, diligent

Name: Seth Ellsworth

Year: 4th

Major: Architecture; Business minor

Experience/Skills/Strengths: AutoCAD, 3ds Max, Adobe Illustrator, Photoshop & Dreamweaver. Strong communication and organization skills, experience working with a variety of materials

Name: Crystal Glover

Year: 4th

Major: Architecture

Experience/Skills/Strengths: AutoCAD, 3ds Max, Adobe Illustrator, Adobe Photoshop. Strong

communication and organization skills

Name: Kevin C. Krupp

Year: 4th

Major: Architecture

Experience/Skills/Strengths: Model Building, Wood Shop, AutoCAD, Adobe Illustrator, Adobe Photoshop. Strong personal interaction skills and action oriented. Experienced model shop

technician

Name: Nim Patel

Year: 3rd Major: Biology

Experience/Skills/Strengths: Windows Office, Adobe Photoshop. Strong communication skills,

timeliness in work, focused and motivated

Name: Colin Scheer

Year: 3rd

Major: Humanities

Experience/Skills/Strengths: Researching, Writing, Adobe Photoshop. I am prompt in turning

work, and work well with others

Name: Nader Tadros

Year: 4th

Major: Architecture

Experience/Skills/Strengths: AutoCAD, Adobe Photoshop, Adobe Illustrator. Strong

communication, motivational, and interpersonal skills. Experienced scaled model builder and

presentation developer

2. Team Purpose and Objectives

This is a continuing IPRO with the overall aim of improving and enhancing the image of Illinois Institute of Technology, both as an institution and a physical campus, in regards to sustainability and "green" practices. To that end, the current semester is focused on several design projects based on concepts generated in the previous semesters along with input from the current semester to enhance a new "green" campus. We will also be providing information on how IIT is currently acting in a sustainable fashion and how students on campus can contribute to our image as a sustainable campus

3. Background

Illinois Institute of Technology has been at the forefront of innovation from its architecture to providing a competitive education environment. Even with this innovation, IIT struggles with its image as a sustainable campus. An example of this is the recent letter D grade IIT received on its

college sustainability report card, a comparative evaluation of sustainable activities in campuses across the United States and Canada. The goal of this IPRO is to come up with solutions to make IIT more sustainable and at the same time create a branding scheme to bring awareness to IITs sustainable efforts.

The first IPRO 311 was in Spring 2008. The team was responsible for the conceptual plans for branding IIT as a sustainable campus. A design manual was developed to document the ideas.

The Summer 08' IPRO team created a design for a solar workstation, several greenstallations, energy gauges for buildings, and a plan for permeable pavements. This IPRO team also contributed to the existing design manual for making IIT "greener." They also created an online group on Facebook that attempts to gather attention and support from the student body in favor of new sustainability practices on campus. They briefly conducted research for possibly having nuclear power at IIT. This group also created a survey that tried to retrieve useful information that would contribute to the process of moving towards a more sustainable campus.

The Fall 08' IPRO team went further with the ideas presented from Spring 08' along with contributing new ideas. The permeable paving initiative looked at researched and identified areas of the campus that have draining issues. They redesigned a solar workstation which was ready for construction. A green wall initiative was proposed to be put outside academic buildings in ideal locations. The last project that this team worked on was to propose the use of Aerogel as an insulation material for campus buildings.

The Fall '08 IPRO also headed a contest regarding the logo of the IPRO's to be used as the primary logo for all preceding and following IPRO extensions. The team hosted a series of seminars to reach out to the IIT community. The seminars featured guest speakers regarding the topic of sustainability around the world and city and about things that can be implemented on the IIT campus. Fall '08 Inter-Professional project's main focus was directed towards the design and construction of a solar powered chair.

This semester's IPRO team will continue building upon the work that previous groups have started. The world is changing its stance on non-renewable sources of energy. Being a part of the Illinois Institute of Technology community, it is our mission to stay ahead of the norm and lead this movement to a more sustainable campus.

This year's IPRO will focus on the studies and research conducted here at IIT. Our research will also follow the progression of the studies and research done and their implementation in the physical world; inventions and their effects. A section of the IPRO will also focus on furthering the ideas of the previous IPRO semesters and implementing them on the IIT campus. The class split up into three subgroups to become more efficient, marketing, facilities and design.

4. Team Values Statement

To ensure a safe and productive working environment, a list of the expected behaviors and what constitutes "expected behaviors" are described below:

Cooperation – We will

- Stay focused on our particular tasks.
- Volunteer our time and energy when able if another group member requests it.
- Praise and encourage our group members by recognizing their hard work and success.

Integrity – We will

- Speak openly and honestly to each other.
- Hold ourselves accountable for our words and actions.
- Follow-through with all pledges or promises.
- Speak highly of our group members and leaders to others outside of our IPRO class.
- Keep any and all criticism class constructive, class-related, and free of personal attacks.

Timeliness – We will:

- Arrive on time for all meetings and events.
- Begin the day's tasks at 3:15pm regardless of attendance.
- Submit all work and materials by the expected deadline.
- Inform the group, in advance, when we will be tardy or absent.
- Keep an easily accessible, regularly updated schedule of all deadlines and meetings.

Communication - We will:

- Provide regular updates about individual and team progress
- Approach each other about concerns or problems before proceeding to more extreme measures.
- Check our email and iGroups on a daily basis and provide a reply no more then 24 hours later
- Provide our full attention and remain silent when another group member takes their turn to speak.

Any member of the group who does not comply with the expected behaviors set forth by the group will be addressed by the group as a whole or by a designated team member. The group or designated team member will attempt to resolve the problem in a safe and conductive manner and will discuss the lack of participation with said member. Once a resolution has been found said member will be reintegrated into the IPRO in a manner to ensure positive participation.

5. Methodology & Work Breakdown Structure

The process to enhance the image of Illinois Institute of Technology, both as an institution and an intellectual community, in regards to sustainability, technology, innovation and minimal resource consumption will lie in the discovery of historical research done at IIT in combination with proposed ideas and research for the future.

To accomplish the scope of the project, a highly innovative form of research will be conducted. This research will encompass the modern day IIT, 1940 to present, in conjunction with its predecessors, the Armour Institute of Technology (founded in 1893) and Lewis Institute (founded in 1895). The research will focus on the many ground-breaking studies done in conjunction with the institutions.

All research and pertinent information found will be catalogued, recorded, and applied to everyday practical applications. Research for the future will be presented in the formal fashion of our IPRO (311) predecessors; Spring of 2008, Summer of 2008, and Fall of 2008.

The breakdown of work will consist primarily of three divisions; marketing, design, and facilities. Including:

- The marketing division will be in charge of reaching out to and informing the surrounding community of IIT about the innovative research that has taken place at IIT over the years and proposed solutions to enhance the image of IIT for the future. A subset of the marketing team is the research department; responsible for researching inventions and ideas produced here at IIT.
- The second division, design, will consist of a small group of people who will continue working on Solar Workstation (Fall '08) and other proposed ideas that require physical labor.
- The third group, facilities, will be responsible for physically implementing the proposed ideas of this semester, and the preceding semesters, in and around campus; as well as proposing new ideas for future IPRO extensions to study and implement.

6. Expected Results

Here is a list of the results we plan to achieve through the course of this semester. Our group's work breaks down into three major groups: marketing (with a subgroup of history), design and facilities.

- a. Search through the archives (Marketing group)
 - Find names of inventors from IIT
 - Compile an informational listing
 - Find means of advertising this info to the campus
- b. Quick improvements (Facilities group)
 - Put in place rain sensors
 - o Prevent sprinklers from running in rain, snow, freezing temperatures
 - Insulation for buildings
 - o Prevent leaks near windows
- c. Seminars (Marketing group)
 - Invite lecturers to speak about green technology
 - Possibly create our own presentation about IIT going green
- d. Advertise IIT history (Marketing group)
 - Create posters or fliers
 - Banners for street poles
- e. Workstation chair (Design group)
 - Work on the current prototype

Some of the challenges include time limitations, prioritizing, and expenses. There are many activities under the sustainability name that the group could take up however, due to the other expectations such as deliverables for IPRO as well as just one semester only a few activities can be accomplished. Also, due to numerous activities a few have to be chosen in which a larger part of the budget can be allocated to for example the workstation chair will need more money for updates. Also, since the IPRO budget is limited the money given has to be used to accomplish what we can and buy what we need to. Another challenge each member faces is to be able to

express the ideas of this IPRO to the IIT administration to put the ideas into practice. Finally, every member has a responsibility to try to broaden their views and think of more ways that IIT can be made more sustainable.

The group will approach the administration as well as IIT faculty and staff to propose the implementation of the ideas the group has researched and tested.

7. Budget

Equipment				
(Workstation Chair)				
Services				
(Printing posters, flyers, banner)				
Transportation	\$100			
(Visit location to see green technology)				
Participant Support	\$100			
(Canvas bags, t-shirts, incentive to attend seminar)				
Goal Parties	\$150			
Total	\$1040			

8. Schedule of Tasks and Milestone Events

Refer to Gantt Chart

9. Individual Team Member Assignments

Design Leader- Kevin Krupp

Design Group: Oladipo Animashaun, Mark Chauhan, Richard Alexander

Facilities Leader: Alejandro Aguilar

Facilities Group: Seth Ellsworth, Nader Tadros, Mark Chauhan

Marketing Leader: Crystal Glover

Marketing Group: Nim Patel, Colin Scheer, Nader Tadros

Refer to Gantt Chart

10. Designation of Roles

Minute Taker- Alejandro Aguilar Agenda Maker- Nader Tadros Time Keeper- Nim Patel Weekly Timesheet Collector/Summarizer- Seth Ellsworth Master Schedule Maker- Crystal Glover IGroups- Mark Chauhan

Gantt Chart

1	ID	oanti (Task Name	Duration	Start	Finish	Resource Names	1
2	1		Phase I	1 day?	Tue 1/20/09	Tue 1/20/09	All	+
Team Charter	2		Define Problem	3 days	Tue 1/20/09	Thu 1/22/09	All	
Research Presentations	3		Break into Subgroups	1 day?	Tue 2/3/09	Tue 2/3/09	All	
S	4	-	Team Charter	4 days	Thu 1/29/09	Tue 2/3/09	Kevin	
Project Plan Todays Thu 1/29/09 Fri 2/6/09 Alex,Crystal,Nader,Nim Project Plan First Draft 4 days Thu 1/29/09 Thu 2/3/09 Alex,Crystal,Nader,Nim Project Plan First Draft 3 days Thu 1/29/09 Thu 2/3/09 Alex,Crystal,Nader,Nim Project Plan First Draft 1 day? Fri 2/6/09 Fri 2/6/09 Alex,Crystal,Nader,Nim Thu 2/19/09 Thu 2/19/09 Thu 2/19/09 Thu 2/	5		Research	13 days	Tue 2/3/09	Thu 2/19/09	All	
8	6	111	Research Presentations	1 day	Thu 2/19/09	Thu 2/19/09	All	
Project Plan Second Draft	7	III	Project Plan	7 days	Thu 1/29/09	Fri 2/6/09	Alex,Crystal,Nader,Nim	
Project Plan Final Draft	8	III	Project Plan First Draft	4 days	Thu 1/29/09	Tue 2/3/09	Alex,Crystal,Nader,Nim	
11	9		Project Plan Second Draft	3 days	Tue 2/3/09	Thu 2/5/09	Alex,Crystal,Nader,Nim	
12 Midterm 10 days Tue 2/17/09 Mon 3/2/09 TBA	10	III	Project Plan Final Draft	1 day?	Fri 2/6/09	Fri 2/6/09	Alex,Crystal,Nader,Nim	
13 Midterm First Draft 5 days Tue 2/17/09 Mon 2/23/09 TBA 14 Midterm Final Draft 3 days Tue 2/24/09 Thu 2/26/09 TBA 15 Midterm Practice 3 days Thu 2/26/09 Mon 3/2/09 TBA 16 Marketing 1 day? Thu 2/19/09 Thu 2/19/09 Marketing Subgroup 17 History of IIT Research 21 days Thu 2/19/09 Thu 3/19/09 Marketing Subgroup 18 History Advertisements 13 days Tue 3/24/09 Thu 4/9/09 Marketing Subgroup 19 Seminar Planning 21 days Thu 2/19/09 Thu 3/19/09 Marketing Subgroup 20 Seminar 1 day? Tue 4/14/09 Tue 4/14/09 All 21 Design 1 day? Thu 2/19/09 Thu 2/19/09 Design Subgroup 22 Research 6 days Thu 2/19/09 Thu 2/19/09 Design Subgroup 23 Modified Chair Design 6 days Thu 2/19/09 Thu 3/19/09 Design Subgroup 24 History Advertisements 13 days Thu 2/19/09 Thu 3/19/09 Design Subgroup 25 Research 6 days Thu 2/19/09 Thu 3/19/09 Design Subgroup 26 Facilities 1 day? Thu 2/19/09 Thu 3/19/09 Design Subgroup 27 Research 14 days Thu 2/19/09 Thu 3/10/09 Facilities Subgroup 28 Implementation Plan 14 days Thu 2/19/09 Thu 3/10/09 Facilities Subgroup 29 Presentation 1 day? Tue 4/14/09 Tue 4/14/09 Facilities Subgroup 30 Phase III 1 day? Tue 4/14/09 Tue 4/14/09 Tue 4/14/09 31 IPRO Day Preparation 14 days Tue 4/14/09 Tue 4/14/09 Tiba 4/14/09 33 Abstract/Brochure 1 day? Mon 4/27/09 Mon 4/27/09 TBA 34 Abstract/Brochure First Draft 6 days? Tue 4/14/09 Tue 4/21/09 TBA 35 Poster 1 day? Mon 4/27/09 Mon 4/27/09 TBA 36 Poster First Draft 6 days? Tue 4/14/09 Tue 4/21/09 TBA 37 Poster First Draft 5 days Tue 4/14/09 Tue 4/21/09 TBA 38 Final Presentation 12 days? Tue 4/14/09 Tue 4/21/09 TBA 39 Final Presentation First Draft 6 days Tue 4/14/09 Tue 4/21/09 TBA 39 Final Presentation First Draft 6 days Tue	11	III	Phase II	1 day?	Thu 2/19/09	Thu 2/19/09	All	
Midterm Final Draft	12	III	Midterm	10 days	Tue 2/17/09	Mon 3/2/09	TBA	
15	13	III	Midterm First Draft	5 days	Tue 2/17/09	Mon 2/23/09	TBA	
Marketing	14	III	Midterm Final Draft	3 days	Tue 2/24/09	Thu 2/26/09	TBA	
17	15	III	Midterm Practice	3 days	Thu 2/26/09	Mon 3/2/09	TBA	
History Advertisements	16	III	Marketing	1 day?	Thu 2/19/09	Thu 2/19/09	Marketing Subgroup	
19	17		History of IIT Research	21 days	Thu 2/19/09	Thu 3/19/09	Marketing Subgroup	
Seminar	18	III	History Advertisements	13 days	Tue 3/24/09	Thu 4/9/09	Marketing Subgroup	
21	19	III	Seminar Planning	21 days	Thu 2/19/09	Thu 3/19/09	Marketing Subgroup	
Research 6 days Thu 2/19/09 Thu 2/26/09 Design Subgroup	20	-	Seminar	1 day?	Tue 4/14/09	Tue 4/14/09	All	
Modified Chair Design 6 days Thu 2/26/09 Thu 3/5/09 Design Subgroup	21	III	Design	1 day?	Thu 2/19/09	Thu 2/19/09	Design Subgroup	
Final Modified Chair Design 6 days Thu 3/12/09 Thu 3/19/09 Design Subgroup	22	III	Research	6 days	Thu 2/19/09	Thu 2/26/09	Design Subgroup	
Chair Construction 28 days Tue 3/24/09 Thu 4/30/09 Design Subgroup	23	III	Modified Chair Design	6 days	Thu 2/26/09	Thu 3/5/09	Design Subgroup	
Facilities	24	III	Final Modified Chair Design	6 days	Thu 3/12/09	Thu 3/19/09	Design Subgroup	
Research	25	III	Chair Construction	28 days	Tue 3/24/09	Thu 4/30/09	Design Subgroup	
Implementation Plan	26	III	Facilities	1 day?	Thu 2/19/09	Thu 2/19/09	Facilities Subgroup	
29 Presentation 1 day? Tue 4/14/09 Tue 4/14/09 Facilities Subgroup 30 Phase III 1 day? Tue 4/14/09 Tue 4/14/09 Tue 4/14/09 31 IPRO Day Preparation 14 days Tue 4/14/09 Fri 5/1/09 All 32 Abstract/Brochure 1 day? Mon 4/27/09 Mon 4/27/09 TBA 33 Abstract/Brochure First Draft 6 days? Tue 4/14/09 Tue 4/21/09 TBA 34 Abstract/Brochure Final Draft 5 days Tue 4/21/09 Mon 4/27/09 TBA 35 Poster 1 day? Mon 4/27/09 Mon 4/27/09 TBA 36 Poster First Draft 6 days Tue 4/14/09 Tue 4/21/09 TBA 37 Poster Final Draft 5 days? Tue 4/21/09 Mon 4/27/09 TBA 38 Final Presentation 12 days? Tue 4/14/09 Wed 4/29/09 All 39 Final Presentation First Draft 6 days Tue 4/14/09 Tue 4/21/09 Take	27	III	Research	14 days	Thu 2/19/09	Tue 3/10/09	Facilities Subgroup	
1 day? Tue 4/14/09 Tue 4	28		Implementation Plan	14 days	Tue 3/10/09	Fri 3/27/09	Facilities Subgroup	
31	29		Presentation	1 day?	Tue 4/14/09	Tue 4/14/09	Facilities Subgroup	
32	30		Phase III	1 day?	Tue 4/14/09	Tue 4/14/09		
32	31	1	IPRO Day Preparation	14 days	Tue 4/14/09	Fri 5/1/09	All	
34 Abstract/Brochure Final Draft 5 days Tue 4/21/09 Mon 4/27/09 TBA 35 Poster 1 day? Mon 4/27/09 Mon 4/27/09 TBA 36 Poster First Draft 6 days Tue 4/14/09 Tue 4/21/09 TBA 37 Poster Final Draft 5 days? Tue 4/21/09 Mon 4/27/09 TBA 38 Final Presentation 12 days? Tue 4/14/09 Wed 4/29/09 All 39 Final Presentation First Draft 6 days Tue 4/14/09 Tue 4/21/09 TBA	32		Abstract/Brochure	1 day?	Mon 4/27/09	Mon 4/27/09	ТВА	
35 Poster 1 day? Mon 4/27/09 Mon 4/27/09 TBA 36 Poster First Draft 6 days Tue 4/14/09 Tue 4/21/09 TBA 37 Poster Final Draft 5 days? Tue 4/21/09 Mon 4/27/09 TBA 38 Final Presentation 12 days? Tue 4/14/09 Wed 4/29/09 All 39 Final Presentation First Draft 6 days Tue 4/14/09 Tue 4/21/09 TBA	33		Abstract/Brochure First Draft	6 days?	Tue 4/14/09	Tue 4/21/09	ТВА	
36 Poster First Draft 6 days Tue 4/14/09 Tue 4/21/09 TBA 37 Poster Final Draft 5 days? Tue 4/21/09 Mon 4/27/09 TBA 38 Final Presentation 12 days? Tue 4/14/09 Wed 4/29/09 All 39 Final Presentation First Draft 6 days Tue 4/14/09 Tue 4/21/09 TBA	34	111	Abstract/Brochure Final Draft	5 days	Tue 4/21/09	Mon 4/27/09	ТВА	
37 Poster Final Draft 5 days? Tue 4/21/09 Mon 4/27/09 TBA 38 Final Presentation 12 days? Tue 4/14/09 Wed 4/29/09 All 39 Final Presentation First Draft 6 days Tue 4/14/09 Tue 4/21/09 TBA	35	111	Poster	1 day?	Mon 4/27/09	Mon 4/27/09	ТВА	
38 Final Presentation 12 days? Tue 4/14/09 Wed 4/29/09 All 39 Final Presentation First Draft 6 days Tue 4/14/09 Tue 4/21/09 TBA	36	111	Poster First Draft	6 days	Tue 4/14/09	Tue 4/21/09	ТВА	
39 Final Presentation First Draft 6 days Tue 4/14/09 Tue 4/21/09 TBA	37		Poster Final Draft	5 days?	Tue 4/21/09	Mon 4/27/09	ТВА	
	38		Final Presentation	12 days?	Tue 4/14/09	Wed 4/29/09	All	
40 Final Presentation Final Draft 3 days Tue 4/24/00 Thu 4/22/00 TRA	39		Final Presentation First Draft	6 days	Tue 4/14/09	Tue 4/21/09	ТВА	
3 days Tue 4/21/09 Till 4/23/09 TDA	40	111	Final Presentation Final Draft	3 days	Tue 4/21/09	Thu 4/23/09	ТВА	
41 Final Presentation Practice 6 days Thu 4/23/09 Thu 4/30/09 TBA	41		Final Presentation Practice	6 days	Thu 4/23/09	Thu 4/30/09	ТВА	







