# Mid-Term Report Alumni Memorial Hall Renovation, I-PRO 335 Spring Semester 2008 Illinois Institute of Technology



IMAGE SOURCE: http://www.ruhr-uni-bochum.de/kgi/projekte/rub\_expo/k5/k5\_t4.htm

Advisors: Ralph Muehleisen Eduardo DeSantiago

# 1.0 Revised Objectives

- 1. The scope of I-Pro 335 is both a conclusion to unfinished work from the previous two semesters along with new projects that will start and end this semester. Work to be concluded and closed-out from last semester:
  - Final LEED (Leadership in Energy and Environmental Design) documentation and identification of individuals that might be part of a LEED team should the school desire to pursue that route.
  - Final design of Americans with Disabilities Act (A.D.A.) elements including a re-design of the elevator, and approval by the client.
  - Using the Code of Ethics written last semester as a base line, the code will be rewritten to strengthen its objective to provide guidance for the I-Pro.

New projects to begin and completed this semester are:

- The roof re-design- Green roof options. This may also include storm water retention and grey water recycling systems, as well as any updates to the buildings primary plumbing systems.
- Heating, Ventilation, and Air Conditioning (HVAC) Lab hoods, air conditioning load calculations and Hydronic Heating.
- Electrical systems design- Illumination calculations and design, Alarm systems, and 'Off-heating' load calculations from equipment to be housed in Alumni Memorial Hall (A.M.H.).
- Construction schedule.
- Cost estimate.
- 2. No changes were been made to the original Objectives.

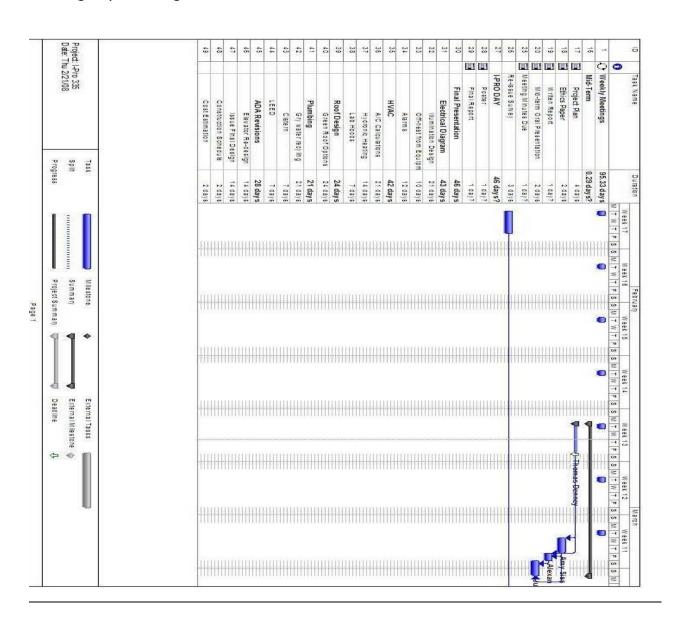
#### 2.0 Results to Date

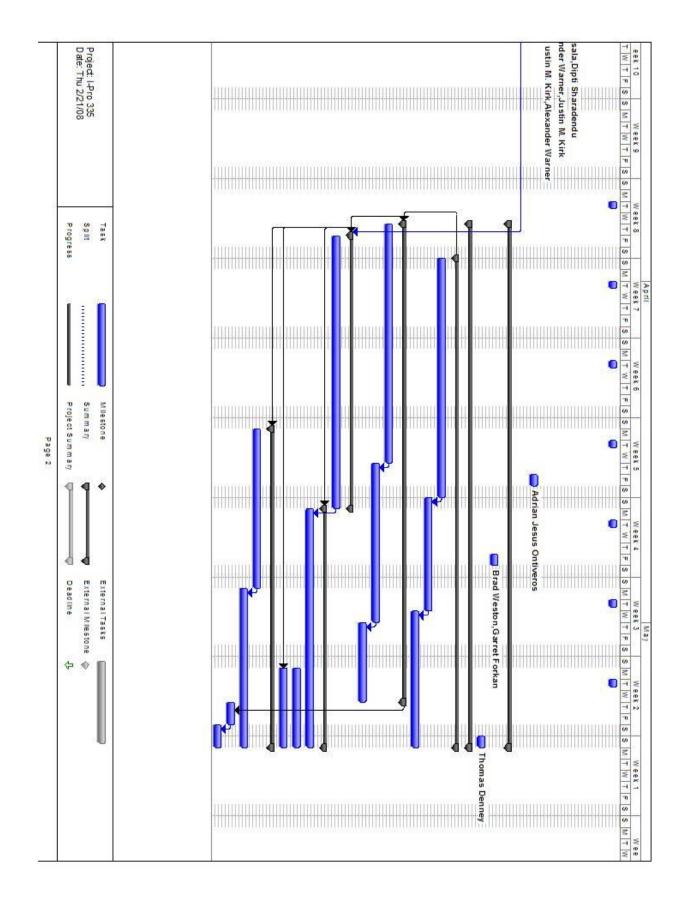
We are currently on track with our schedule as is planned out in the Project Plan. We have completed the Project Plan, Ethics Paper, Mid-term Oral Presentation, and Written Report.

There has only been one Group Meeting reschedule, but several individual team meetings in addition to preplanned meetings.

#### 3.0 Revised Task/Event Schedule

There have been no changes to our Task/Event Schedule. These first few weeks have been used to gather the first decisions into each of the oncoming project finalization times. This information is covered in the previous section Results to Date. There have been no delays in our timelines, which is probably due to the well laid out team's structure that we have, and the participation in individual group meetings in addition to our group meetings.





# 4.0 Changes in Individual Team Member Assignments and Designated Roles

There has been no change in the Team Member Assignments or Designated Roles.

Thomas Denney 5<sup>th</sup> year Architecture

Experience: Had this IPRO last semester, knowledgeable of LEED, works in

architectural firm.

Project Manager Project Plan

**LEED Final Recommendations** 

Final Report to Advisors

Michael Ericksen 4<sup>th</sup> year Civil Engineering

Experience:

I-Pro Final Report

LEED Final Recommendations Rain Water Cistern Storage

Garret Forkan 4<sup>th</sup> year Civil Engineering

Experience:

Poster and Brochure

Rain Water Cistern Storage

Kieran Healy 4<sup>th</sup> year Architectural Engineering

Experience:

I-Pro Final Report

**HVAC Load Calculations** 

Green Roof Design

Ei Sheng Hong 4<sup>th</sup> year Civil Engineering

Experience:

I-Pro Presentation

Elevator Design Development

Yong-Wan Kim 4<sup>th</sup> year Civil Engineering

Experience:

Re-issuing Survey and Quantifying Data

Justin M. Kirk 4<sup>th</sup> year Civil Engineering

Experience: Interned past 3 years for civil engineering firm, handled rainwater runoff and storage and oversaw LEED work.

Mid-Term Presentation

Grey and Rain Water Recycling System

Adrian Jesus Ontiveros 5<sup>th</sup> year Electrical Engineering

Experience: Focusing on power engineering and have had several internships with Argonne National Laboratory.

Meeting Minutes
Project Plan

Elevator Design Development Illumination Calculations

Eric Rogers 4<sup>th</sup> year Civil Engineering

Experience:

Final Report to Advisors Construction Schedule

Nathaniel Roth 4<sup>th</sup> year Civil Engineering

Experience:

I-Pro Presentation Cost Estimation

Dipti Sharadendu 4<sup>th</sup> year Electrical Engineering

Experience: Interned in laser and systems division of Miyachi Unitek Corporation, and core control systems and communications ECE classes.

**Ethics** 

Alarm Systems

**LEED Final Recommendations** 

A.D.A. Compliance

Amy Sissala 4<sup>th</sup> year Architectural Engineering

Experience:

Ethics

**HVAC Load Calculations** 

LEED Final Recommendations Elevator Design Development

Alexander Warner 4<sup>th</sup> year Electrical Engineering

Experience:

Mid-Term presentation

Off-Heating Calculations from Equipment

**Electrical Load Calculations** 

Brad Weston 5<sup>th</sup> year Architecture

Experience: 5 semesters of comprehensive building design studios specializing in energy building systems and modeling.

Poster and Brochure

A.D.A. Design Development

Green Roof Design

### **Designation of Roles:**

Architect of Record, Project manager: Thomas Denney

Minute Taker: Adrian Jesus Ontiveros Group Leader Civil E.'s: Nathaniel Roth Group Leader Elec. E.'s: Dipti Sharadendu

Agenda Maker: Kieran Healy

LEED Specialist t for Arch. E.'s: Amy Sissala LEED Specialist for Architects: Brad Weston LEED Specialist for Elec. E.'s: Alexander Warner LEED Specialist for Civil. E.'s: Michael Ericksen

Time Reporting Manager: Garret Forkan Digital Files Manager: Ei Sheng Hong

# 5.0 Barriers and Obstacles

- 1. Current plans need to be reprinted such as the Roof Plans, for use in our structural analysis. The original copies and print outs are not legible with respect to the small details.
- 2. The individual building of Alumni Memorial Hall does not have clear boundary lines with respect to the other buildings around it. This complicates certain considerations for LEED fulfillments.
- 3. There was no elevator expert in the group, so we have members of our Civil, Architectural, and Electrical teams advise as needed.