IPRO 331
Global Warming & Community Outreach
Project Plan

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Illinois Institute of Technology
Fall 2009
1. Team Information
   a. Roster
      i. Adarsh Shukla
      ii. Daniel Kim
      iii. Jaime Sahagun
      iv. Puneet Ralhan
      v. Ryan McClure
      vi. Sean Murray
      vii. Shweta Gandhi
      viii. Tanya Prabhakar
   b. Strengths, Needs, & Expectations
      i. Individuals of the group will be giving presentations in public forums such as schools and clubs. For this every member has sufficient public speaking skills. Along with this we will be creating power point presentations and for this several group members have stated their proficiency with Microsoft power point.
   c. Team Identity
      i. IPRO 331: Global Warming and Community Outreach

2. Team Purpose & Objectives
   a. Utilize previous presentations to inform and educate the public about the cause, impact, and responses to global warming.
   b. Divide the overall issue into major aspects including the ones set by previous IPRO’s while adding our own.
   c. Present material to larger and more diverse audiences in order to create widespread awareness about global warming.
   d. Focus on solid, scientific data from credible sources that define why and how global warming is occurring, rather than discussing the politics and economics that surround the issue.
   e. Add the most recent updates to the presentation such as climate engineering.
   f. Use previous research and presentations but taking a more systematic approach when creating presentations.
g. Devise a creative ways to interact with the audience such as skits and demonstrations.

h. Provide surveys at the end of each presentation to receive feedback.

i. Update an existing IPRO 331 website and enhance it with updated research. Also to make is more accessible to the general public and make them aware of it. This will allow anyone anywhere to access information on global warming.

j. Enhance team members’ public speaking abilities via interactions during class along with mock presentations throughout the semester.

k. Each member is expected to organize and present at three different locations per month at least throughout the semester.

3. **Background**

   a. This IPRO is not sponsored by a company and there are no customers or target audience. We are trying to raise awareness of anybody and everybody.

   b. People began to start researching the possibility of global warming in the early 1900’s. German scientist Guy Stewart Callendar was the first to compile international temperature recordings from other scientists to conclusively state that the Earth’s temperature had indeed risen between 1890 and 1935 by as much as half a degree Celsius. He was also the first to propose the idea that carbon dioxide emission by the burning of fossil fuels leads to the greenhouse effect. The U. S. Weather Bureau’s Division of Climate and Crop Weather confirmed his findings that the temperature had indeed warmed. This paved the way for future climate research.

   c. The Intergovernmental Panel on Climate Change (IPCC) was first established in 1988. In 1990, they released their first report, titled the First Assessment Report, concluding that the Earth’s temperature had risen, however discrepancies remained as to weather this was a natural process or if industry was to blame. The IPCC’s latest report, released in 2007, conclusively states that serious effects of global warming have become evident.

   d. IPRO 331, Global Warming and Community Outreach, began in the fall of 2007, advised by Professor Lykos with the help of Carol DeBiak, from Galvin Library. During this term, the IPRO group successfully compiled a 50 minute presentation
covering a vast majority of the scientific analysis of global warming. They presented in teams of two people each at De La Salle High School at the end of the semester.

e. In Fall 2008 students broke down the topic of global warming into four main topics: the polar ice regions, bio-fuels, carbon dioxide emissions, and solar energy. Each group then had its own presentation. This approach seems choppy because it is not sufficient to only present on one of these sub-groups. Therefore, we propose to take a more systematic approach by focusing presentations around the problem (Global Warming), the causes, and the responses.

4. Team Values Statement
   a. Desired behaviors from the members include attending every meeting of IPRO in a timely manner. Every member is also expected to communicate clearly about availability and other obligations so work can be planned accordingly. Also each member is expected to contribute towards classroom discussions.

5. Methodology/Brainstorm/Work Breakdown Structure
   a. We start out this IPRO with the main problem, which essentially is that there is not enough awareness today about global warming.
   b. Approach to Solving the Problem/Raising awareness
      i. Dividing the issue into subgroups using the ones from past IPROs as well as some of our own
      ii. Dividing up the members of our team into groups of two or three to focus in on one subgroup and research it.
      iii. Coming together as a team to combine our research and systematically put together presentations which incorporate all the subgroups
      iv. Finding public forums in which to present our research as well as prior research.
      v. This will allow us all to give presentations stating the problem, the cause, and the response. Presentations will be conducted based on power point presentations. They will also be adjusted based on our audience. For example, we cannot give an elaborate presentation with complex terms to an audience of kindergarteners.
c. In order to determine whether or not the presentations were successful, we will be utilizing a pre- and post-test. The IIT chapter of the IRB will be involved in order to determine whether or not our conduct is responsible in terms of data acquisition. Overall, the group will try to determine whether or not the audience learned anything new about global warming and if they are more interested in learning how to combat the problem. All analysis will be uploaded to the iGroups website for future IPRO use.

d. Deliverables

i. Throughout the semester the required deliverables will be handled by small groups of two to three students of which will then be presented to the whole group for analysis. Once a final draft is created and approved, the deliverable will be turned in to the IPRO office by the due date.

6. Expected Results

a. Through the community outreach presentations, team members are expected to improve their presentation/communication skills. Part of the improvement process will make use of peer-evaluation critique sheets, where team members can comment on each other’s presentations.

b. The main expectation for this IPRO is for various communities in the Chicago-land area to better understand the scientific data and facts that conclude Earth’s temperature is indeed rising. This will be done through the team’s explanation of events during the presentation.

c. It is the team’s hope that a significant difference will be observed between the pre- and post-tests administered, in that audience members will have a better understanding of the topic.

d. The only products resulting from this IPRO would be the PowerPoint presentations and an updated website. However, whether or not the PowerPoint presentations will be incorporated into the website for public use will be at the digression of the IPRO team members.

e. The expected results will directly address the ‘problem’ the audience faces in understanding the scientific research backing global warming. Any questions that arise can hopefully be addressed by team members, or given further resources to
find an answer, such as the updated IPRO 331 website. Our final goal/deliverable is not tangible; it is a measure of how well the audience perceives the information being presented.

f. Our results will be a direct measure of the solution framework – it will determine whether focused lectures are more efficient than one broad presentation, depending on the type of audience. Based upon audience reaction and feedback, changes can be made to the presentation. (broad presentations as well to get the general concept of Global Warming across to the community)

7. Budget
   a. $200 for transportation. This will cover gas and parking expenses.
   b. $200 for printing of color brochures, surveys/questionnaires.
   c. $100 for snacks or miscellaneous spending. If people are going to come watch us we might want to bring cookies or chips etc. This would also cover any spending we have not yet thought of that we may need.

8. Tasks & Milestone Events
   a. September 11th - Project Plan due
   b. September 18th – Begin presentations
   c. October 5th-15th – Midterm Reviews
   d. November 11th- Ethics Reflective Report
   e. November 20th – Final Project Report (first draft)
   f. November 30th - Abstract/Brochure
   g. November 30th - Poster
   h. December 2nd - Final Presentation
   i. December 4th- Final Project (final version)

Due to the nature of our IPRO, most of our presentations given to the public will be on a first come, first serve basis, and this will mean that presentation dates will not be known until around a week ahead of time. The community presentations will be documented in the final presentation on IPRO day.
9. **Team Member Roles**
   
a. Team Leader: Adarsh Shukla (Outreach), Ryan McClure (Presentation Organizer)
b. Minute Taker: Shweta Gandhi
c. Treasurer: Jamie Sahagun
d. Website: Sean Murray
e. Printing: Daniel Kim
f. Project Plan: Puneet Ralhan, Daniel Kim
g. Schedule/Contact Info Compiler: Tanya Prabhakar