

PIA members can propose a project for a student team from select D-Lab and MIT courses. If the project is selected, students then focus their creativity and problem solving skills during the 16-week semester on designing solutions to the challenge within the context of the class, under the supervision of the instructor, and in collaboration with PIA representatives. At the end of the semester, the student team presents practical recommendations to the PIA partner and community representative for consideration.

D-LAB APPROACH TO EDUCATION

D-Lab inspires and supports MIT students to apply their engineering, social science, and business skills to innovate solutions for a broad range of global poverty issues. There are a few key elements that define D-Lab's approach to education and are important to class projects. These are:

- Real projects for real people
- Solutions for people living in poverty
- Hands-on and experiential learning
- Multi-disciplinary approaches
- Working *with* communities, not just *for* communities
- Building capacity in communities
- Technology-focused solutions (for select classes)

DEFINING THE SCOPE OF THE PROJECT

The scope and expectations of the project should be clearly defined. Here are some guiding questions to consider when suggesting a project:

- Are the objectives of the project clear?
- Is there a good understanding of the context, supported by previous work?
- Is there an opportunity to work with a specific community who has the need and desire for a solution, as well as a person who has been identified to serve as a liaison?
- Are the deliverables clearly defined and measurable in some way?
- Have the students' specific contributions to a broader project been clearly defined, and are they achievable within the time frame of the class?
- Are there plans for the project's continuity?
- Is this a good learning opportunity for students?

In order to ensure this is a positive learning experience for all, it is very important to clearly define the expectations about what the students are capable of delivering to the community partner prior to the start of the project.

HOW TO APPLY

If you are interested in proposing a class project, please let Dana Gorodetsky know by **Friday, January 27, 2017**. The relevant D-Lab instructor can then work with you to define the scope of the project. An example of a class project description is on the following page. These descriptions are shared widely, so you may want to consider what information is confidential or sensitive when presenting your material.

D-Lab offers a variety of classes to graduate and undergraduate students, however, most students enrolled in D-Lab classes are undergraduates. Below are examples of D-Lab courses that have traditionally included class projects.

Spring: [Design](#), [Energy](#), [Earth](#)

Fall: [Design for Scale](#), [Supply Chains](#), [Waste](#)

EXAMPLE OF D-LAB CLASS PROJECT

D-Lab Energy Class: Asociación Fénix

Asociación Fénix (Asofenix) is an NGO that uses renewable energy technology to improve the standard of living in rural Nicaraguan communities. Asofenix proposed an orange juice-producing process to allow the families of El Roblar, Nicaragua to make additional income. Currently, the profit for orange products is minimal. The focus of this project is to develop a prototype for a low-energy consumption mechanism to securely seal orange juice plastic bags. This could result in a way for the women's community group in El Roblar to rapidly seal and sell juice bags in order to supplement their income during off-season months by making juice with the surplus oranges that would otherwise be left to spoil. The bag sealer has to use minimal energy and produce a quality and durable seal in a short-time and at a low cost. The sealer also has to be made of locally-available materials and be safe and easy for the women to use. (Low Energy Bag Sealer Final Report, Liburd, Shannon et al., MIT D-Lab)

FIELD WORK

While the opportunity for students to travel to the site and work in the field during or after the class is highly desirable, its feasibility depends on student ability/desire to travel and funding availability. Some classes are able to secure limited funding for student travel, but the instructors have to allocate funding to the different class projects based on multiple considerations. Students can fundraise for their own travel, or PIA members can provide funding for field work.

ROLES AND RESPONSIBILITIES

MIT D-Lab will be responsible for the following:

- Matching proposed projects with relevant classes (project selection is subject to student interest)
- Assigning an MIT mentor to work with student(s) throughout the duration of the semester
- While PIA members will communicate directly with instructors and students, PIA staff will be available to provide support as needed

PIA Members will be responsible for the following:

- Assigning a representative who has the time and capacity to serve as a liaison and mentor to the students for the duration of the project
- Identifying a contact with the community partner who has the capacity to provide feedback and guidance and who is fully committed to the project
- Providing feedback on the students' work at the end of the semester
- Ensuring availability of local host if there is travel associated with project