

# PROJECT-BASED LEARNING FOR THE SCHOOL OF ARTS & SCIENCES AND HAJIM SCHOOL OF ENGINEERING AND APPLIED SCIENCES

#### THE OPPORTUNITY

Project-Based Learning (PBL) is an experiential high impact teaching and learning practice in which student teams design solutions to complex real-world problems by applying course content as an academic assignment. Interested faculty of undergraduate students in the School of Arts & Sciences and Hajim School of Engineering and Applied Sciences can work with the Director of Career Curricular Initiatives, Dr. Lynn Donahue, to identify a good-fit organizational partner, course-relevant project, and meaningful assessment. These instructors can apply for a stipend through the *Bond Family Foundation Faculty Scholar Grants*.

#### THE BENEFITS

- Mastery of course content knowledge and skills through application of theory to practice.
- Critical and creative thinking through addressing complex problems.
- Engagement with the material through student-directed work.
- Professional work habits and competencies like communication, teamwork, and resilience.
- Exploration of career fields and work environments and self-understanding of interests and abilities.
- Access to experiential learning in the classroom which enhances equity in education and access to careerready experiences and networks, particularly valuable for students with intersectional identities.
- Contribute to local organizations' attainment of research and new ideas and exposure to student talent.

### THE ELEMENTS AND PROCESS

Researched-informed hallmarks of PBL have been developed by <u>Krajcik and Shin (2014)</u>, the <u>Buck Institute for Education</u> and at the <u>University of Pennsylvania's Graduate School of Education</u>.

- 1. Authentic Problem or Question: Working with an organizational partner, create a "driving question" or problem that aligns with disciplinary practices and course goals, can be solved with student expertise during the time allotted, and fulfills the organization's goals and student learning outcomes.
- 2. Sustained Inquiry through Student-Centered Projects: Engage and support students in an extended and rigorous process of posing questions, locating resources, researching information, and developing a deliverable through collaborative work. Provide students with content and contextual issues regarding the organization and topic, through a presentation from the organization and other resources.



- **3.** Critique and Revision: Provide access to feedback from instructor, peer, and organizational partner, a process that scaffolds the work for students. Integrate reflection on the application of course content, effectiveness of student inquiry and collaborative work, and quality of the product.
- **4.** Public Product and Presentation: Create a forum for student delivery or presentation of their work. Consider discussing with students how the experience led to their attainment of College Competencies and a strengthened professional story (with the Greene Center) and their access to local, paid, summer internships through the Bond Family Foundation Student Scholars Program with PBL partner organizations.

#### **FACULTY RESOURCES AND SUPPORT**

Dr. Lynn Donahue, the Director of Career Curricular Initiatives in the Greene Center, can provide the following:

- 1. Bond Family Foundation Faculty Scholar Grants\*: Instructors of undergraduate students in the SAS and Hajim can receive a stipend up to \$5,000 through the Bond Family Foundation Faculty Scholar Grants. Funds can be used to compensate for instructional development time and operational needs such as transportation, food, honoraria, and materials. Award amount will be dependent on depth of course and project development, number of partners, size of the class, number of applicants, and sustainability of the work. Priority will be given to faculty who have not previously received a Bond stipend or integrated a project in the identified course.
- 2. Identification of Organizational Partners and PBL Project\*\*: A partner will initially be identified through support of the Greene Center. If applying for a Bond stipend, the partner needs to be a Rochester-based for-profit organization. Lynn can facilitate the crafting of a project that fits students' learning goals, skill sets, and timeline and is of value to the partner.
- 3. Course Development Support and Project Plan: The Director of Career Curricular Initiatives can work with faculty on the development of PBL-related assignments and assessment. While not required, a Planning Document drafted by the Director of Career Curricular Initiatives, can enhance communication of roles and desired outcomes, and integrate a timeline of partner engagement points as scaffolding for students.
- 4. Outcomes Assessment: Samples of student products and completion of a student and faculty Impact Assessment on attainment of academic goals, organizational outcomes, and competencies will be requested (and required for the Bond stipend). Outcomes data will also be requested from the organizational partner and feedback will be provided for future course development.
- \*Stipend recipients are required to participate in PBL planning meetings, distribute the *Greene Center PBL Student Impact Assessment*, complete the *PBL Faculty Impact Assessment*, and submit samples of students' PBL products.
- \*\*Faculty interested in a stipend and partnering with only non-profit organizations through Community-Engaged Learning should contact the Center for Community Engagement. Faculty interested in a stipend for experiential learning practices that do not include an external partner should connect with the Teaching Center.

#### **NEXT STEPS**

- 1. Contact Lynn Donahue at lynn.donahue@rochester.edu or call at 585-275-2366 to request a meeting!
- 2. Submit an application and tentative course syllabus on the Faculty & Staff page of the Greene Center's website.
- 3. If approved, work with the Greene Center regarding partner and project identification and course development.

## Stipend Deadlines (For Fall 2024):

- Rolling Application deadline: January 1<sup>st</sup> through April 1<sup>st</sup>
- Notification of awards: April 8<sup>th</sup>, 2024
- Development of partners and projects: Ideally by July 1<sup>st</sup>, 2024

## ABOUT LYNN DONAHUE

Lynn Donahue spent 30 years in higher education with 20 of those years serving as the founding Director of a Community-Engaged Learning program and consultant and trainer for faculty on pedagogy, community partnerships, assessment and engaged scholarship. She served as adjunct for courses within Interdisciplinary Studies and at the Warner School, of which she is an alumna (Ed.D. 2001), and currently oversees the Greene Center's courses. Lynn counseled and ran programs on career development and is currently leading career curriculum, College Competency-building, and experiential initiatives in the Greene Center for Career Education and Connections.