Teaching Innovation Grants

The Center for Educational Resources (CER) announces a grant program for faculty who wish to employ new teaching strategies for their undergraduate courses in the Whiting School of Engineering and the Krieger School of Arts & Sciences. The CER is committing approximately $100,000 to this grant program. Applicants may request up to $20,000 for a proposed project. Proposals are due no later than Friday, December 6, 2019 at 5:00 PM EST. These grants are made possible by the generosity of Johns Hopkins Emeritus Trustee Christopher Hoehn-Saric and the Smart Family Foundation.

Goal
The goal of the program is to foster innovative curricular design and teaching practices on the Johns Hopkins University Homewood campus.

Examples
Proposals are sought for projects of varying scope. Proposals may center on designing a new course or modifying an existing course in full or in part. For new courses, preliminary approval of the department is required. Examples of curricular design and teaching strategies and practices that might be funded include, but are not limited to:

- Creation of Open Educational Resources (OER). OERs are teaching, learning, or research materials shared freely by instructors. Instructional OERs include teaching modules, textbooks, videos, tests and quizzes, and simulations.
  - Examples: The Ancient City of Babylon, one of several textbook modules created by Marian Feldman, Professor, Near Eastern Studies.
  - PyRosetta is an interactive Python-based interface to the powerful Rosetta molecular modeling suite created by Jeff Gray, Professor, Chemical and Biomolecular Engineering.

- Development of models or simulations to teach complex concepts, create virtual/digital laboratory experiments, or allow students to test theories.
  - Example: Virtual Laboratories for Statics and Mechanics of Materials, Rachel Sangree, Lecturer, Civil Engineering. Note: Download the PDF. You will need Flash to run the animations.

- Incorporation of experiential learning strategies into the curriculum such as field-based assignments, role plays, research-based projects, games, and case studies.
  - Examples: Baltimore Food System Research, Adam Sheingate, Professor, Political Science.
  - Classics Research Lab, Shane Butler, Professor, Classics Department, and Gabrielle Dean, Sheridan Libraries.

- Improvement of classroom climate with teaching and learning strategies that promote inclusion, integrate best practices of universal design, increase awareness of bias and micro-aggressions, integrate and encourage practices of cultural humility.
  - Examples: see Hopkins Universal Design for Learning, an initiative supported by the JHU Provost's Office.
• **The Inclusive Object Toolkit**, Jennifer Kingsley, Lecturer and Assistant Director, Museums and Society.

  Integration of **cross-disciplinary activities** in the course, such as actively bringing together students of different academic backgrounds to work collaboratively on a project.

  - Example: **Hack Your Life Design Challenge**, Steve Marra, Associate Teaching Professor, Mechanical Engineering.

Projects should build on and reinforce known best practices in education, including active learning, the encouragement of high-level student-faculty interaction, and student collaboration. Proposals should demonstrate awareness of the diversity of learners and their experiences.

CER staff are available to provide feedback on proposals before submission and offer assistance in identifying qualified students to assist in grant implementation. Questions may be directed to Amy Brusini at abrusini@jhu.edu or 410-516-5340.

**Eligibility**

Proposals may be submitted by individual faculty or faculty teams. Interdisciplinary proposals are encouraged. Graduate students and postdoctoral fellows are not eligible to submit proposals for this RFP but may participate on teams under the supervision of a faculty member. Undergraduate courses must be listed or cross-listed in the Krieger School of Arts & Sciences and Whiting School of Engineering course catalog. Proposed new courses must have preliminary approval from the department.

**Proposal Submission Deadline**

Proposal are due no later than Friday, December 6, 2019 5:00 PM EST.

**Funding and Project Support**

The CER is committing approximately $100,000 to this grant program. Applicants may request up to $20,000 for a proposed project.

Funds may be used to support graduate or undergraduate students to partner with faculty members in developing instructional modules and related resources. Students will be paid an hourly rate of $15.00 an hour. Upon completion of the project, faculty will receive a $1500 stipend, which should be included in the budget.

Funding for equipment, software applications or their development will be considered, however, sustainability of such resources is an important criterion in the review process. Existing resources (e.g., the Digital Media Center, freely available software and apps) should be investigated.

The CER will provide in-kind support, including project management, instructional design, access to and support for the use of CER multimedia lab and related software and equipment, pedagogical consultation, assessment assistance, and workshops to assist project teams and/or undergraduates enrolled in the courses.

Project development may begin once funding announcements are made; project completion expected by the end of fall semester 2021.
Application and Submission Information

Grant Timeline
RFP announced: Monday, September 23, 2019
Proposal due: Friday, December 6, 2019 5:00 PM EST
Funding announcements: December 31, 2019
Funded projects must be completed by December 31, 2021

Content and Form of Application
1. Name, department, email address, phone number, short bio-sketch for each participant (limit ½ page per participant).
2. Title and Abstract (limit ½ page).
3. Project Description (limit 2 pages). The project description should include the following: description of the course; the relevant learning objectives; the proposed new curricular design or teaching strategies, assignments, exercises and/or projects that will be developed to meet those objectives; plan for implementation; anticipated outcomes; and plan for sustainability beyond the timeframe of the project.
4. Budget (limit ½ page).
5. Project Plan and Timeline (limit ½ page).
6. Evaluation and Assessment Plan (limit 1 page).

Submission Procedure
Proposals should be submitted in PDF format as email attachments to Amy Brusini at abrusini@jhu.edu. Deadline for submission: 5:00 PM EST Friday, December 6, 2019. An acknowledgement of your submission will be sent within 24 hours.

Criteria for Project Selection
Proposals will be reviewed by a committee consisting of KSAS and WSE faculty and CER staff. Projects will be evaluated based on the following criteria:

1. Transforms undergraduate instruction: The proposal describes ideas for creating new courses or enhancing existing courses with the creation of new components that advance innovative teaching.
2. Enhances student learning: The proposal references relevant research demonstrating how student learning of course content may be improved by the planned innovative curricular design or teaching strategies including universal design, active learning, student-faculty interaction, and student collaboration. Proposals should demonstrate awareness of the diversity of learners and their experiences.
3. Has a viable assessment strategy: The proposal suggests concrete ways to evaluate and report its impact on teaching and learning in the course it supports.
4. Reflects an ongoing commitment: The proposal is grounded by persistent core values of the Krieger School of Arts & Sciences and the Whiting School of Engineering as well as the department or program represented. Specifically, the course or resources developed will be offered/used recurrently.
5. Is cost conscious: The proposal demonstrates a good fit between purpose and plan. It embraces a selective use of instructional technology while keeping implementation costs to a minimum. The proposal must also describe how the course and resources developed will be sustained beyond the grant support.
6. Develops an approach that can be generalized or scaled: The project serves as a prototype that can be modified, enhanced, or extended to other venues, divisions, departments, or courses.