



**CENTER for  
TEACHING  
EXCELLENCE &  
INNOVATION**

## Teaching Innovation Grants

The Center for Teaching Excellence and Innovation (CTEI) is pleased to announce a grant program for faculty who wish to employ innovative teaching strategies for their undergraduate courses in the Whiting School of Engineering and the Krieger School

of Arts & Sciences. The CTEI 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, February 28, 2025 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 support student success by fostering innovative, inclusive, and evidence-based curricular design and teaching practices on the Johns Hopkins University Homewood campus. The program aims to equip students with relevant skills and knowledge by integrating creative technology solutions that enhance learning outcomes across diverse disciplines.

### Examples

Proposals are sought for projects of varying scope. Proposals may center on developing resources and strategies that support designing a new course or modifying an existing course. 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:

- Development of **new courses or redesign of existing courses**:
  - [Flipped Learning in Cognitive Neuroscience](#), a traditional lecture-based course redesigned by Brenda Rapp, Professor, Department of Cognitive Science, to include recorded video lectures for students to watch outside of class and the development of small group activities used in class.
  - [Redesigning Real Analysis I](#), a core course in mathematics that was redesigned with a focus on writing, created by Richard Brown, Teaching Professor, Department of Mathematics.
  - [The Teaching Fellows Project: Community-based Learning in Baltimore City Schools](#), a community-based learning course in which Hopkins students teach writing to students in Baltimore City, led by Katharine Noel, Associate Teaching Professor, Writing Seminars.
- Integration of **generative artificial intelligence (AI) tools** into courses to enrich the teaching and learning experience:
  - [AI and Data Methods in History](#), a course that introduces students to a variety of technology, including Generative AI tools, that help them analyze and think critically about historical data, created by Louis Hyman, Dorothy Ross Professor of Political Economy in History and Professor at the SNF Agora Institute.
- 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:
  - [Online Modules for Palaces, Temples and Tombs in Mesopotamia](#), a series of 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.
- [Comparative Cinema](#), an interactive website built using Omeka, open-source exhibition software used by Anne-Eakin Moss, Assistant Professor, formerly in the Department of Comparative Thought and Literature.
- Development of **models or simulations** to teach complex concepts, create virtual/digital laboratory experiments, or allow students to test theories:
  - [Virtual Laboratories for Statics and Mechanics of Materials](#), a set of lab simulations using Finite Element Modeling created by Rachel Sangree, Associate Teaching Professor, Civil Engineering.
- Incorporation of **experiential learning strategies** into the curriculum such as field-based assignments, role plays, research-based projects, games, and case studies:
  - [Baltimore Food System Research](#), a course that examines the issues prompted by food disparities by using Baltimore as a research site, created by Adam Sheingate, Professor, formerly in the Department of Political Science.
- Improvement of **classroom climate** within a specific course by using teaching and learning strategies that promote diversity, equity, and inclusion, integrate best practices of universal design for learning, increase awareness of bias and micro-aggressions, integrate and encourage practices of cultural humility:
  - [The Inclusive Object Toolkit](#), a project focusing on diversity and inclusivity in the ways museum objects are researched and presented, created by Jennifer Kingsley, Associate Teaching Professor and 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:
  - [Hack Your Life Design Challenge](#), a collaborative project involving students from Hopkins and MICA who were tasked with creating “life hacks” to make some part of their lives easier, created by Steve Marra, Associate Teaching Professor, Mechanical Engineering.

Projects should build on and reinforce known evidence-based 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 and support a sense of belonging for all students.

CTEI 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](mailto:abrusini@jhu.edu) or 667-306-9816.

### 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.

Note: In order to support many instructors, the CTEI requests that an individual apply for no more than one grant per application cycle.

## Proposal Submission Deadline

Proposals are due no later than **Friday, February 28, 2025 at 5:00 PM EST**.

## Funding and Project Support

The CTEI 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. Undergraduate students will be paid an hourly rate of \$17.00 per hour. Graduate student salaries will be based on the Collective Bargaining Agreement (CBA). 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 CTEI will provide in-kind support including project management, instructional design, access to and support for the use of CTEI multimedia 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 spring semester 2027.

## Application and Submission Information

### Grant Timeline

RFP announced: Monday, December 16, 2024

Proposal due: Friday, February 28, 2025 at 5:00 PM EST

Funding announcements: April 2025

Funded projects must be completed by May 21, 2027

## 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. Student Job Description(s) (limit ½ page per student). For each student, please provide a detailed job description including required duties, duration of the position (approximate number of hours), any specific skills required, and expected competencies (critical thinking, teamwork, leadership, etc.) gained during the experience.
5. Budget (limit ½ page).
6. Project Plan and Timeline (limit ½ page).
7. 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](mailto:abrusini@jhu.edu). Deadline for submission: 5:00 PM EST Friday, February 28, 2025. 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 CTEI 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 for learning, active learning, student-faculty interaction, and student collaboration. Proposals should demonstrate awareness of the diversity of learners and their experiences and support a sense of belonging for all students.
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 commitment by the Krieger School of Arts & Sciences or 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.