

## Spring 2024 Faculty Scholarship and Research Funding Opportunity Course-based Undergraduate Research Experiences Award Grant Proposal Guidelines

### Overview

The Pace University Office of Research invites proposals for funding of up to \$5,000 to support the incorporation of research and creative inquiry into the undergraduate curriculum. This award process is committed to supporting the developmental integration of research across the curriculum referred to as "scaffolding" in undergraduate research pedagogy. This approach prioritizes the value of inquiry-based learning through the research or creative inquiry process at introductory, intermediate, and advanced levels of instruction across disciplines and schools. This can be done through the significant revision of existing courses and the creation of new Course-based Undergraduate Research Experiences (CUREs). Our goal is to make course-based research and creative inquiry more inclusive and available to all students as the experiential pedagogy that distinguishes Pace undergraduate education. Examples of eligible course projects include partnering with a community organization to develop a course-based research or creative inquiry project; incorporating physical or digital archival research into a course; or enhancing labs to emphasize exploration and inquiry.

### **Background and Description**

Since 2020, the Classroom-based Undergraduate Research Experiences Awards, renamed in 2024 as Course-based Undergraduate Research Experiences Awards, have helped to expand Pace's research-based experiential learning opportunities in the classroom.

The Course-based Undergraduate Research Experiences Awards are a response to recent research studies. Compelling evidence shows that the pedagogy of undergraduate research, which incorporates inquiry-based learning and research methods into classroom teaching, significantly benefits both students and faculty. Studies also show that early introduction to research activities in a classroom setting increases the overall number of students engaging in research, and advances diversity, equity, and inclusion among student researchers.

For this award program, we seek course proposals that engage students in research and creative inquiry, defined as a process that seeks answers to a research or creative question(s) using discipline-appropriate research methods. This definition aligns with the Council on Undergraduate Research (CUR)'s definition of undergraduate research and creative inquiry: "With an emphasis on process, CUR defines undergraduate research as a mentored investigation or creative inquiry conducted by undergraduates that seeks to make a scholarly or artistic contribution to knowledge." The proposal should be for either a new or existing course in the Instructor/PI's field of expertise. The course should be designed to develop new avenues of inquiry that involve students in experiential learning through research or creative inquiry. The awards cover costs of the research project and/or compensate faculty time for developing a new course-based research project.

#### **Award Funding and Deadline**

Grant Awards up to \$5,000 (placed in a Scholarly Research Account) will be awarded. The funds can be used for summer salary, research assistantships, partnerships, and/or research supplies. Full-time faculty in any discipline and across all schools are eligible to apply.

The deadline for proposal submission is Monday, April 22, 2024.

#### How to Apply

Proposals should explain how research or creative inquiry will be operationalized in a course-based context and articulate the research question(s) that the course will explore. Awardees are required to implement their course-based research designs in the Fall or Spring semesters of the 2024-2025 academic year. Proposals must include a section that identifies anticipated student learning outcomes and how they will be assessed. More details are available in the "Instructions for Application Preparation" below.



### Past Awardees and Resources

Past Classroom-Based Undergraduate Research Experiences Award Winners: https://www.pace.edu/office-of-research/funding-opportunities/internal/classroom-based-research-awards-winners

Designing and implementing classroom research in a report from the National Academies Press: http://www.nap.edu/catalog/21851/integrating-discovery-based-research-into-the

Course-based research experiences from CURENET: https://serc.carleton.edu/curenet/index.html

Council on Undergraduate Research (CUR) resources and publications: https://www.cur.org/resources-publications/position-statements-white-papers/

Go to <u>https://undergraduateresearch.pace.edu/resources/#CUR</u> to become a CUR member for free under Pace's Enchanced membership and download more resources.

Instructions for Application Preparation – please use the proposal template below

#### Eligibility

Full-time clinical, tenure-track or tenured faculty are eligible to apply.

A faculty member may submit only one proposal per award cycle to the Course-based Undergraduate Research Experiences Award program.

Applications are invited from faculty members in any discipline.

Previous Classroom-Based Research Experiences Award winners are not eligible to reapply for five years.

#### **Proposal Format**

Each proposal must be a maximum of 6 pages (single spaced, 12 pt. font, one-inch margins) and will consist of the following components:

Signature Page (one page)

Title Page and Summary (one page) - Project title, your name and school, and a 200-word summary of the research question(s) under study.

Project Description (three pages) - Please type your project description in Word and append it to the proposal. Describe the contribution of the project to the field of study/discipline. Describe research question(s) and their significance.

The method(s) by which the research question(s) will be addressed by students in a classroom setting or curricular context. Explain how and why the design is appropriate for undergraduate education. For example, how does it align to their needs, talents, and interests?

Implementation timeline specifying how the research aspect/project will be integrated into the course.

Assessment of the project's impact on student learning (e.g. surveys of student attitudes to research or assessment of learning, etc). In addition to answering the proposed research question(s), what will students know and be able to do upon completion of the course?



### Budget (one page)

Use the template provided on page 8 to briefly describe your budget and justify the expenses requested. You can request summer salary, materials/supplies, or student research assistant stipends etc.

### Additional Required Information (not included in 6-page limit)

Citations can be added on a separate page(s). Citations are references to the work of others as part of your background or to support your approach.

Append a biosketch (use the biosketch template below or append an NIH/NSF biosketch)

Current Grants and Pending Grant applications

Proposal Submission Proposals must be submitted via our <u>online submission system</u> as a single PDF and contain the following: Signature Page Title Page Project Description Budget and budget justification Additional Required information (citations, biosketch and current and pending grants)

### Proposal Review and Evaluative Criteria

- Contribution of the project to expanding the reach of undergraduate research experiences within the Pace curriculum
- The design of the inquiry-based learning in the proposed course
- Contribution of the project to teaching and content knowledge of the field of study/discipline, including the method(s) by which the research or creative inquiry question(s) will be integrated into the proposed course
- Implementation timeline specifying how the new or revise course will be approved and made available to students
- Assessment of the project's impact on student learning

We anticipate that the award notifications will be made in late May 2024.



### SIGNATURE PAGE

Please include your name, the names of the Department Chair, and the Dean, and leave the signature fields empty. (The Office of Research will obtain the signatures via Adobe Sign following the submission of your application).

A. Signature Page:

Title of Proposal:

Pace School/College:

Department:

Principal Investigator

Name:

Signature:	_Date:
Department Chair	
Name:	
Signature:	Date:
Dean	
Name:	
Signature:	_Date:



### PI:

CoPI should sign on this page. If there is more than one CoPI, please attach additional CoPI signature pages.

Title of Proposal:

Pace School/College:

**Department:** 

Со	Princ	ipal	Investigate	or
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Name:

Signature: \_\_\_\_\_Date: \_\_\_\_Date: \_\_\_\_\_Date: \_\_\_\_\_Date: \_\_\_\_\_\_Date: \_\_\_\_\_Date: \_\_\_\_\_Date: \_\_\_\_\_\_Date: \_\_\_\_\_Date: \_\_\_\_\_Date:

Department Chair					
Name:					
Signature:	Date:				
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Dean					
Name:					
Signature:	Date:				



- **B. Project Title Page and Summary** (one page):
- PI Name:
- Pace School/College:
- Proposal Title:
- <u>Proposal Summary (200 word maximum):</u>



# C. Project Description - 3 pages maximum

Please type your project description in Word and append it to the proposal.

Contribution of the project to the field of study/discipline. Describe research question(s) and their significance.

The method(s) by which the research question(s) will be tackled by students in a classroom setting or curricular context. Explain how and why the design is appropriate for undergraduate education. For example, how does it align to their needs, talents and interests?

Implementation timeline specifying how the research aspect/project will be integrated into the course.

Assessment of the project's impact on first year student learning (e.g. surveys of student attitudes to research or assessment of learning, etc. In addition to answering the proposed research question(s), what will students know and be able to do upon completion of the course?



### PI:

## D. Budget (one page)

Please use this form and justify all expenses requested. The total request must not exceed \$5,000.

ltem	Amount	Fringe Benefits*	Total
Supplies			
Research Assistant			
Travel			
Other***			

Fringe on summer salary is 8.24%
Fringe on part-time student research assistants is 0.59%

**\*\*** Please describe in budget justification, if requested.

**Budget Justification** (use the rest of this page only)



# E. Additional Required Information (not included in the 6 page limit)

(i) <u>Citations</u> can be added on a separate page(s)

(ii) Current and Pending Funding

If you have grant support please describe it briefly here. If you recently applied for a grant then please describe that as well. If you have neither, state 'none'.

(iii) Append a Biosketch to the proposal. A biosketch template is on the next page.

Alternatively, include your current NSF or NIH biosketch if you have one.



# **BIOSKETCH**

Provide current 2-page biosketch in NSF format, or complete the following form (no more than 2 pages).

<u>Name:</u> Department: <u>Rank:</u> School:

<u>Telephone:</u> <u>Email:</u>

Education: (bachelors and above, include dates)

Academic and professional recognition: (awards, invited talks at conferences, service on committees of societies, editorships of journals, etc.)



### PI:

**Research History:** List five most recent publications/books/performances or other significant scholarly achievements.

**Synergistic Activities**: Include service such as review committees; community outreach, broadening participation of undergraduates in research etc.

**Educational and Training Experience**: PhD students, Master's students, mentoring and/or training of undergraduate students, special teaching projects and curriculum development activities.

List of Suggested Reviewers or Reviewers Not To Include (optional) SUGGESTED REVIEWERS:

**REVIEWERS NOT TO INCLUDE:** 



## Checklist

Proposals must be submitted as a single PDF and contain the following:

Signature Page(s)

1-page Title Page and Summary

3-page project description

1-page budget and budget justification

Additional pages including citations, current/pending funding and biosketches

# Each complete proposal must be uploaded as a single PDF onto our online submission site by Monday, April 22, 2024

# Online Submission Form

Questions?

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