

Call for applications: NSF IUSE mentored grant-writing cohort

a collaboration between the Innovation Hub and the Office of the Executive Vice President for Research

Purpose

As part of the [Transformative Education 2.0](#) Purdue Move, and with generous financial support from the [Lilly Endowment](#), the **Office of the Provost/Innovation Hub** (the Hub) and the **Office of the Executive Vice President for Research** (OEVPR) invite applications for a mentored proposal-writing experience targeting the [NSF IUSE program](#) (National Science Foundation - Improving Undergraduate STEM Education). The Hub is an engine and incubator for innovation in teaching and learning, supporting the Provost's goal of making Purdue the most innovative residential learning program in the US among large research universities. The OEVPR supports the research enterprise and works to enhance Purdue's success in attracting federal funding. Together, the Hub and the OEVPR see an opportunity to support teaching and learning innovation at Purdue by promoting large-scale proposals for NSF funding, particularly in the IUSE program.

The NSF IUSE program supports advances in undergraduate STEM education via grants on two tracks (Engaged Student Learning/ESL, and Institutional and Community Transformation/ICT) at several levels up to \$2M. NSF anticipates funding 30 Level 2 and Level 3 projects from the overall IUSE budget (\$61M) each year. This mentored writing program will not support proposers applying to the capacity-building, conference, or Level 1 avenues of the IUSE program.

Eligibility

All Purdue West Lafayette principal investigators interested in submitting a proposal to the NSF IUSE program are eligible to apply to join this cohort. However, this mentored grant-writing program focuses on **IUSE Level 2 and Level 3 proposals**; as such, participants in this cohort-based program must have:

- *a project idea and vision* large enough to justify applying for higher-level awards.
- *sufficient preliminary evidence* to warrant a higher-level proposal.
- *sufficient prior experience* in managing research grants to serve as PI on a higher-level award.
- *an appropriate network of collaborators* in place to execute the work.

Prior NSF funding is useful but not required to participate in this program. Proposers who are uncertain about their readiness to submit a proposal at a higher IUSE level, on either the ESL or ICT tracks, should [contact the Innovation Hub leadership](#) for a consultation.

Program Description

Program priorities and goals. Participants with proposal ideas in **any area supported by the IUSE program** are welcome, and for this mentored writing program all disciplines and/or ideas supported by the IUSE program are eligible to participate. The goal of this program is to support Purdue researchers seeking *higher-level funding* for their work in undergraduate STEM education. Participants must be well positioned to propose a larger-scale research project to the IUSE program (at Level 2 or 3), per the eligibility requirements listed above.

Program parameters and expectations. The cohort will include **up to 6 PIs/teams** who are ready to submit an IUSE proposal at Level 2 or Level 3. This cohort-based program targets the **July 19, 2023 deadline** for IUSE Level 2 and Level 3 proposals. The cohort will meet in-person as a group every few weeks starting in late March 2023. The goal of the cohort meetings is to promote disciplined ideation and project definition, writing accountability, and improved likelihood of funding. The draft cohort schedule is shown in the table below. *Cohort members are expected to keep up with the writing schedule and expectations, and peer review of proposal sections will play a central role in the experience.* Note: the entire proposing team of PI and co-PIs is welcome to attend the cohort meetings.

Program facilitation. This program will be co-facilitated by Innovation Hub and OEVPR personnel. Dr. Edward Berger, Associate Vice Provost for Learning Innovation and Director of the Innovation Hub, who is a former NSF program officer and the recipient of \$8M+ in NSF funding from IUSE programs as PI or co-PI in the last 7 years. *He will provide leadership within cohort sessions as well as detailed review and feedback of proposal sections as they are written by participants.* He will also orchestrate a panel review using the NSF model. Sally Bond, Assistant Director of Research Development Services in the OEVPR, will support storyline development and focused creation of compelling narratives and rationales for large-scale proposals.

IUSE cohort schedule

Session	Topic/milestone	Inter-session writing task
1 (week of 3/27)	Storyline, intellectual merit, broader impact	Proposal storyline polishing, IM & BI sections, proposal general outline
2 (week of 4/10)	Research questions, hypotheses, tentative project plan	Research design, including methods, sampling, analysis, etc.
3 (week of 4/24)	Literature and preliminary studies	Research design, literature, preliminary studies and the alignment thereof
4 (week of 5/15)	Advisory board, evaluation, data management plan, other sections	First full draft of project description, due 6/9
FULL DRAFT PROPOSALS DUE 6/9		
MOCK REVIEW PANEL WITH IUSE AWARDEES 6/26; FEEDBACK TO COHORT 6/29		
5 (week of 7/3)	Understanding and acting upon panel feedback	Next revision
6 (week of 7/10)	Finalizing the proposal	Final version of all documents

Application Process

Applicants must submit a written proposal for their project composed of:

- A proposal *written using the supplied template (available on the program website)*, and including the required elements defined in the template. These include: title, team, and approximate budget information; a statement of readiness to propose at IUSE Level 2 or Level 3; a DRAFT project summary with tentative statements about intellectual merit and broader impact; a one-paragraph statement about the PI's experiences in research award leadership and management; references as appropriate.
- Note: only the PI of the proposal should apply to this program; *co-PIs are welcome to participate in the cohort events*, but they need not apply to this program.
- An NSF-style (three-page) CV for each of the project team members.

Successful applicants will demonstrate their readiness to compete for a Level 2 or Level 3 IUSE award by conveying a compelling vision, persuasive preliminary results, and their personal readiness to lead a team

on a large project. Submit applications as a **single PDF document** via the [online submission portal](#) by **deadline stated on the program website**.

Notes for proposers

- Refer to the [program webpage](#) for important dates, including pre-submission office hours.
- Proposers with eligibility questions or who are unsure about their readiness to propose at Level 2 or Level 3 should contact Innovation Hub leadership at innovation-hub@purdue.edu to set up a brief consultation.
- The [Innovation Hub website](#) contains expanded detail about this and other Hub programs and funding opportunities.