The CDER Center is pleased to announce another year of our program to help faculty incorporate Parallel and Distributed Computing (PDC) into courses for students in their first two years of undergraduate study.

**Highlights:**

$5000 grant to each of 20 participants  
Participants attend a one-week training workshop (July 25-29, 2022, at the University of Massachusetts, Amherst)  
Training includes PDC content, and educational evaluation methodology  
At this time, the University requires proof of COVID vaccination for participation in on-campus activities, and indoor masking. We have reserved a large indoor space to accommodate social distancing, and may also hold some or all of the training outdoors.  
Focus this year will be on CS1, CS2, and Data Structures courses  
Participants implement PDC course enhancements or new course(s) in academic year 2022-2023  
Participants write and submit a paper describing their course experiment and evaluation  
Application Deadline: March 15, 2022  
Notification: April 15, 2022

**Program Overview**

The $5000 grant is meant to be used in support of curriculum development, attending conferences to present research, and in part to cover travel expenses to the training workshop (airfare, housing, meals, incidentals). Breakfast will be provided as part of the workshop each day. There is no fee for the workshop itself.

Training will be a combination of learning to use PDC tools, learning how to design and instrument an experimental course for meaningful evaluation, and pedagogical approaches for engaging a diverse set of students in PDC studies.

The expectation is that grant recipients will develop experimental versions of course enhancements, or a new course or courses, to be offered in the academic year following the training. Participants commit to preparing a paper that reports the results of their efforts, based on application of the evaluation methodologies covered in the training, and submitting it for publication. The grant is also intended to help support travel to present the paper. Any courseware that is developed will be contributed to the CDER exemplars public repository so that others may benefit from these course development efforts.

**Grant Restrictions**

The grant is available only to US citizens and permanent residents. We regret that we are not able, under NSF rules for disbursement of participant support costs, to route the grant through the participant’s institution. Participants in prior CDER summer training workshops are not eligible for this program

**Application Process**

To apply, submit a brief proposal to the CDER Center using Easy Chair. The proposal should include:

- Applicant’s name
- Academic position
- Institutional affiliation
- Address
- Email
- Phone number
- Description of institution (e.g., 4-year college, 2000 students, 100 CS majors, 8 CS faculty)
For each course that will be enhanced with new PDC content:

- Course number and title
- Year(s) in which it is taken (Freshman, Sophomore, Junior, Senior)
- Required or elective
- Semester or quarter length (weeks)
- Number of credits
- Frequency of offering (number of terms offered per year)
- Single or multiple sections (if multiple, indicate whether you teach some or all)
- Taken by majors only, open to limited other majors, general service course
- Typical enrollment number
- If an elective for majors, indicate the fraction of a graduating class who take the course
- Indication that changes are allowed (e.g., approved by curriculum committee)
- Attach an existing course syllabus
- List the topics from the PDC curriculum you hope to introduce as a result of the enhancement.

For each entirely new course that will be created to offer PDC content:

- Course number and title
- Term it will first be offered
- Student years that it will be open to (Freshman, Sophomore, Junior, Senior)
- Will it become a requirement or is it planned to remain an elective?
- Semester or quarter length (weeks)
- Number of credits
- Planned frequency of offering (number of terms per year, or one-time offering)
- Open to majors only, open to limited other majors, general service course
- Planned enrollment size
- Indication of feasibility of offering course (e.g., “Curriculum committee is OK with trying this next Spring.”)
- Attach a preliminary syllabus (or a copy of a course proposal form) if available
- List the topics from the PDC curriculum you hope to cover in the course.

- Indicate whether you are applying for the grant, or only for workshop attendance support.

- Provide a brief (few sentences) description of your background in parallel and distributed computing, if any, and what you hope to learn from attending the training. Briefly tell us about your motivation for adding PDC content to your course curriculum.

Further application instructions will be posted at [https://tcpp.cs.gsu.edu/curriculum/?q=NSF_Cybertraining](https://tcpp.cs.gsu.edu/curriculum/?q=NSF_Cybertraining) in early December.