

**TEU** TEACHING  
EXPERIENCES FOR  
UNDERGRADUATES  
FROM LIBERAL  
ARTS INSTITUTIONS



This project is funded by a grant from the Improving Undergraduate STEM Education (IUSE) program of the National Science Foundation.



The Teaching Experiences for Undergraduates (TEU) program is a seven-week immersive summer experience in secondary science education at Trinity College in Hartford, CT, funded by the National Science Foundation. TEU participants earn a generous stipend, take a 60-hour course in science pedagogy, and apply what they're learning to teaching urban high school students under the supervision of a master teacher-mentor.

If you are committed to a career in secondary education or seriously interested in exploring the possibility of such a career, apply now.

For info and to apply: [TEU.vassar.edu](http://TEU.vassar.edu)

**Application deadline:** February 28, 2017

**Acceptances announced:** March 15, 2017

**Program start date:** June 5, 2017

**TEU participants receive:**

- Generous stipend
- Travel expenses
- Room and food allowance
- Books and course materials
- Option to earn credit for pedagogy course
- Funding to attend national or regional conference on STEM education

**TEU participants complete:**

- Science pedagogy course
- Teaching practicum under the supervision of a mentor
- A post-summer science education leadership project at home institution

**TEU applicants must be U.S. citizens or permanent residents.**

## **Pedagogy Course**

The equivalent of at least a semester-long course, the science pedagogy course is taught by the TEU summer director of science. This course introduces basic principles and best classroom practices for effective classroom teaching of secondary science. Specific areas of focus include: unit and lesson planning; preparation of laboratory exercises and laboratory safety; active learning in science; formative assessment with a focus on individual students; implementation and integration of technology in science classrooms; Next Generation Science Standards for Practice; and the development of scientific habits of mind and literacy in students. Assignments for the course include daily readings, weekly reflections, an end-of-course self-assessment, and a closing conference.

Participants have the option of earning Trinity College credit for the pedagogy course.

## **Practicum**

During weeks three through six, participants work in teams of three, teaching a science class of their own design. The high school students in these classes are from the Hartford Magnet Trinity College Academy (HMTCA), a partnership between a public high school in Hartford and Trinity College. Trinity and HMTCA have an established and innovative early college program that includes a required two-week summer science enrichment class for rising sophomores.

All HMTCA students engage in an authentic research project. Each classroom group takes responsibility for small parts of a bigger research project, does the field work required for the project, and presents the results at the end of the summer session. Beyond this collaborative research project, the pairs of TEU participants are free to plan additional experiments and other activities according to their interests and the students' needs. A local master teacher, closely supervises each teaching team. The mentor monitors each class, provides feedback, and contributes professional expertise in classroom management techniques and lesson design. Each team debriefs daily with their mentor.

The Trinity TEU may also include a few special speakers (a young professional forensic scientist who herself attended HMTCA has been a popular speaker each year) especially focused on careers in science.

## **Post TEU Activities**

### **Leadership Project**

Following the summer program, TEU participants will undertake a leadership project at their home institution. Such a project could be: serving as a science teaching assistant; peer tutoring; conducting a workshop on implementing the Next Generation Science Standards for other pre-service teachers at their home institution; serving as peer advisor for standards-based lesson planning; organizing or tutoring in an after-school tutoring program at a local school; or giving a campus talk about science teaching and the TEU program. At the project's conclusion, participants will submit a brief report.

### **Conferences**

To support ongoing connections among participants and to contribute to their leadership development, TEU will provide funds to send students to a relevant STEM meeting in the year after their participation. Relevant STEM meetings include those sponsored by the National Science Teachers Association as well as many other STEM discipline-specific educational organizations.

In addition, TEU will host follow-up conferences for TEU participants. The conference for 2016 and 2017 participants will take place in 2018. The conference for 2018, 2019, and 2020 participants will take place in 2020. Participants will attend workshops and have the opportunity to give poster and oral presentations describing the ways in which they have built on what they learned since the summer program.

## **Participant Support**

### **Housing and Food Allowance**

Participants are housed in single rooms in dormitory-style housing with shared kitchen facilities, and receive a food allowance.

### **Stipend and Expenses**

Stipends for participants range between \$2,500 and \$3,500 based on whether or not they choose to receive degree credit for the pedagogy course and on their financial aid status at their home institution. Travel expenses to and from Trinity College from participants' home or institution are reimbursed, and books and other course materials are provided.