



REU and You

Pi Mu Epsilon and the Gamecock Math Club

BENEFITS OF ATTENDING REUS:

Research Mathematics

Work as Part of a Research Team

Work Closely with Faculty

Presentations and Possible Conferences

Glimpse into Life in Grad School

Housing provided (in most cases) by the REU site

Stipend

It's a Fun Way to Spend Your Summer

What is an REU?

The Research Experiences for Undergraduates (REU) program supports active research participation by undergraduate students in any of the areas of research funded by the National Science Foundation. REU projects involve students in meaningful ways in ongoing research programs or in research projects specifically designed for the REU program.

There are approximately 60 different mathematics REUs that students can apply to.

In addition, there is a range of mathematical topics that students may study. These topics include, but are not limited to the following: combinatorics, mathematical modeling, geometry, number theory, knot theory, discrete mathematics, graph theory, actuarial science, computer science, statistics, analysis, algebra, differential equations, mathematical biology and so forth.

The mathematical background and/or ability

of students who attend REUs varies. However, most programs accept students who have had at least all of the Calculus sequence, linear algebra, and a proof-based course.

If you are interested in getting involved in an REU, please act immediately because the application deadlines are usually due by mid-January until early to mid-March.

Where should I attend an REU?

There are many interesting places to attend REUs; however, you should always think about what you would like to study before you decide what REU site you would like to apply for. The information below can help you in your search:

- The National Science Foundation gives a list of all REU sites that they fund in all disciplines. Webpage: http://www.nsf.gov/crssprgm/reu/reu_search.cfm
- The Mathematical Association of America also gives a list of REUs in mathematics. Webpage: <http://www.maa.org/programs/students/undergraduate-research/research-experiences-for-undergraduates>
- The American Mathematical Society also gives a list of REUs in mathematics. Webpage: <http://www.ams.org/employment/reu.html>

In addition, Penn State has a great program called the Mathematics Advanced Study Semesters (MASS). In this program, students have the opportunity to attend the REU and attend classes at PENN State for 16 credit hours. Students will get a *Penn State and/or NSF Mass Fellowship* where they receive in-state tuition, free room and board, free travel to and from Penn State, and a stipend. For more information, here's the website: www.math.psu.edu/mass/.

Ask These Gamecocks About Their REU Experiences:

Neall Caughman: MBI Summer Undergraduate Research Program 2015

Dr. Boylan: Oregon State REU in 1998

Jeffrey Davis: Iowa State REU in Mathematics and Pacific Undergraduate Research Experience (PURE) in Mathematics 2015