

Each summer students in the mathematics and computer science department are invited to participate in academic-year undergraduate research groups. These teams generally consist of one or two freshmen and a single upper-class student who meet weekly with a faculty advisor for the duration of an academic year. Below we showcase the final reports of a number of these research teams.

Additionally, in selected upper-division courses students may be asked to write mathematical papers for class projects.

In the Spring 2009 Experimental Mathematics course, students were each asked to pick a mini-research project topic, define an interesting question within that topic, and explore this question using the mathematical software package Maple. The expository reports of these students are also posted below.

All documents are available to view in Adobe Acrobat Reader (a free download from <http://get.adobe.com/reader/> ). Undergraduate Research Group Reports

- [Association Between Professor Credit Load on Student Course Evaluations by Carly Anderson, Traci Blonquist, and Tom Lee \(Sara Crawford, Advisor\), 2009.](#)
- [k-Equitable Labeling of Graphs by Deborah Beals and Robert Thompson \(Zsuzsanna Szaniszló, Advisor\), 2009.](#)
- [Isolation and Contentment in Segregation Games with Three Types by Mark Burek, Brian McDonough, Spencer Roach, and Brit Wagoner \(Rick Gillman, Advisor\), 2009.](#)
- [Radio Frequency Identification by Stephen Dolph, Dan Roggendorf, Kirsten Swanson, and Adam Watkins \(Karl Zimmerman, Advisor\), 2009.](#)
- [Vertical Transmission in Epidemic Models of Sexually Transmitted Diseases with Isolation From Reproduction by Tim Olson, Thomas Patrick, and Adam Shull \(Daniel Maxin, Advisor\), 2009.](#)

#### Upper-Division Course Final Papers

- [Colonel Blotto by Adam Shull \(Experimental Math, Spring 2009\)](#)
- [Cellular Automata by Robert Thompson \(Experimental Math, Spring 2009\)](#)
- [Pathways from Fermat's Last Theorem by Brittany Wagoner \(Experimental Math, Spring 2009\)](#)
- [The Riemann-Zeta Function by Joshua Zuellig \(Experimental Math, Spring 2009\)](#)