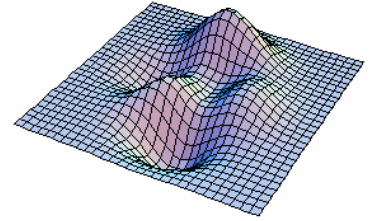
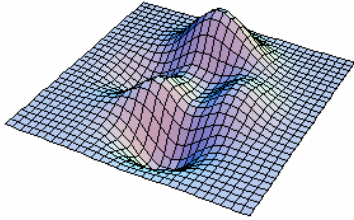


University of Wisconsin-La Crosse
Mathematics Department
Student Newsletter



Vol.8 No.1

Fall '03

WELCOME NEW FACULTY MEMBER

The Mathematics Department is welcoming a new faculty member this Fall. Here is a little about her, in her own words.

Dr. Brooke Fridley:

"Hi, I am the new statistics faculty member in the Math Department. I grew up in Blue Springs, Missouri (outside of Kansas City) and my undergraduate days were spent at Truman State University where I received a BS in mathematics. I just moved from Ames, Iowa where I completed my Masters and PhD in statistics from Iowa State University. I have a large range of research interests from spatial and Bayesian statistics to statistical education.

In my spare time I like to watch sports (particularly the NFL and college basketball), relax and spend time with friends/family. I also enjoy spending time outdoors in the summer (biking, hiking, canoeing, camping, etc.). Being from Missouri where snow is not as abundant, I look forward to all the winter activities that Wisconsin has to offer."

"GUIDE FOR THE MATH MAJOR" AVAILABLE

The "UW-La Crosse Guide for the Mathematics Major" is meant as a resource for current mathematics majors/minors or anyone considering majoring or minoring in mathematics. The guide is available in hard copy in the Mathematics Office – 1020 Cowley Hall and in the mathematics tutoring room – 153 Cowley. There is also an electronic version available on the web at our home page at www.uwlax.edu/SAH/mathematics.

The guide includes information on requirements for the various majors and minors, course descriptions and the course offering pattern, as well as information on activities on campus, scholarships and tutoring opportunities, internships and undergraduate research, and general career opportunities after graduation. We

hope that you will find this a useful source of information on our programs and other activities.

MATH CLUB NEWS

Last year was a very busy and successful year for the Math Club with many fun social and educational gatherings. These included picnics to start and end the year, bowling and pizza with the Viterbo Math Club, and many interesting math talks. For complete details, visit our web site at

<http://www.uwlax.edu/mathematics/mathclub.html/>

Our very able president Victor Feltes and vice president Jessie Schoenemann have graduated and left the university. Some of the remaining leadership team members may be returning this year. We are always looking for new students to help out!

To get things rolling this year, we invite you to join us for the

UW-L All Math Student Fall Picnic

Wednesday, September 10th

Gun Club Shelter

(small shelter down by the zoo)

Myrick Park

Activities begin at 4 pm with food being served at around 5 pm. Everyone is welcome! If you plan to attend, please sign up in 1020 Cowley so we know how much food to buy. The picnic is *FREE*, but donations are welcome!

This is a great way to meet the faculty and other students who are interested in math. You don't have to be a major or even a minor to join us...all you need is interest!

In addition, the Math Club will have its first guest speaker of the semester on Wednesday, September 24th. Steve Walk from St. Cloud State University in St. Cloud, MN will present a talk for students. The talk will probably be given some time in the afternoon. Watch for more information (exact time, location, title, etc.) in the next week or so.

STUDENT ACTIVITIES

Tricia Larson received an Undergraduate Research Grant for the project "Statistical Alternatives for studying Success in Elementary Statistics: A comparative analysis for Logic and Linear Regression". Tricia presented the results at the National Undergraduate Research Conference (The University of Utah). The Research results will be published on the Journal of Undergraduate Research, University of Wisconsin-La Crosse. Tricia started her Masters program in Statistics at The University of Nebraska. Tricia worked on the project with Dr. Abdulaziz Elfessi.

Nick Hutzler worked on an undergraduate research project titled "Commutative Block Monoids and Factorization of Integral Domains" with Dr. Karl Kattchee. Nick was a high school student taking math courses here at UW-L. With this project, Nick won first place in the Gundersen Lutheran High School Math and Science Expo. Currently, Nick is a freshman at Caltech (California Institute of Technology).

Watch for more student activities in the Spring 2004 newsletter!

400 LEVEL COURSE OFFERINGS FOR SPRING 2004

In order to help you begin to plan your schedule for Spring 2004, we thought it might be helpful to give you some information on the schedule for next semester.

The 400 level courses being offered next semester include:

- MTH 410 – Complex Analysis
- MTH 412 – Abstract Algebra II
- MTH 442 – Mathematical Statistics II
- MTH 447 – Nonparametric Statistics
- MTH 480 – Studies in Applied Mathematics

CHALLENGING PROBLEMS COMPETITION

The Math Department's challenging problem competition (CPC) continues this semester. The competition is just for fun, with the intention of stimulating interest in mathematics. The competition is open to all students, alumni, and faculty (except Math). At the end of the academic year the top problem solvers are publicly acknowledged and are awarded small prizes for their efforts.

Here's how it works for those of you who are new to it. A challenging problem will be posted every two weeks on the Math Club bulletin board outside the math research room (102 Cowley Hall). After a problem has been up for two weeks all correct solvers will be acknowledged on the bulletin board. A correct solution will also be posted on the bulletin board along with the next challenging problem. If no correct solutions are received in the first two weeks, the problem will remain open until a correct solution is submitted. Students can pick up a copy of the current problem from the envelope on the Math Club bulletin board located just outside of Room 102 Cowley Hall.

The CPC also has a great web site thanks to Dr. Hoar. New and old problems are posted there along with solutions to the old problems. All correct solvers of the old problems have their names listed there too. The web site is:

<http://perth.uwlax.edu/mathematics/POTM/>

or go to the math department's web site and follow the link to the problem of the week.

Solutions to problems can be submitted to Jeff Boyle, 1033 Cowley Hall by noon on Friday, September 12th.

Problem #1 Fall 2003

Reconstruct the Dominoes

The diagram below shows a complete set of dominoes. Each domino is a 2 by 1 rectangular block with two numbers. Reconstruct the domino block dividing lines. There are 28 dominoes with all pairs [00], [01], [02], ..., [66] represented. The pair [ab] and [ba] are the same domino and it may appear either horizontally or vertically.

1	3	3	6	5	6	5	1
5	1	6	0	4	5	4	5
0	4	4	0	2	5	6	2
2	0	6	6	2	3	5	4
0	6	1	6	2	1	3	3
5	2	1	0	1	0	1	3
2	0	3	4	4	2	3	4

Submit solutions to 1033 Cowley Hall (Dr. Boyle's office) by 12 noon on Friday, Sept. 12.