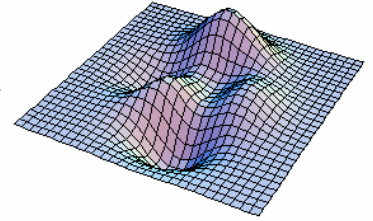
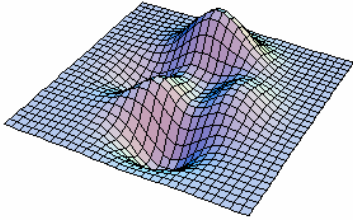


Mathematics Department

Student Newsletter



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WELCOME NEW FACULTY MEMBERS

The Mathematics Department is welcoming several new faculty members this Fall. Here is a little about each of them, in their own words.

Dr. Barbara Bennie: "I grew up near the small town of Grantsburg, Wisconsin. As an undergraduate, I majored in Math Education at Bethel University in a suburb of St. Paul, Minnesota. I went directly from college to graduate school. This past spring, I completed my PhD in statistics at the University of Minnesota in Minneapolis.

I had no intention of going to graduate school until the summer before my senior year of college. That summer, I participated in a Research Experience for Undergraduates (REU) related to industrial mathematics and statistics. Through that experience, math and statistics became more relevant to me and I realized that I had practical career options beyond teaching high school. Suddenly, staying in school for a few extra years didn't sound so bad. Before the summer was over, I was picking out schools and studying for the GRE.

For the past 4+ years, I've worked part-time as a statistician in research and development supporting chemists, engineers and other scientists. I've also provided statistical consulting services at the University of Minnesota to a variety of disciplines. My current research is in game theory.

Fun facts: I often misread analog clocks (particularly when teaching), I have over 55 first cousins, and broomball is my favorite winter sport (little to no talent required)."

Dr. Jon Hasenbank: "I moved to La Crosse from Bozeman, MT, where I earned my M.S. in Mathematics and my Ph.D. in Mathematics Education at Montana State University. In fact, Dr. Jennifer Kosiak was one of the first people I met when I visited the school, and we ended up working together on some interesting professional development projects with high school teachers while we were both students there. About the time Jennifer left for UW-L, I began working on my dissertation on procedural understanding in algebra. It is an increasingly important topic that I look forward to investigating more during the coming years.

When I wasn't working on my degrees, I was able to explore the beautiful and rugged country that is Montana. I canoed the rivers, climbed the mountains (the "easy" ones, anyways) and soaked in the natural back-country hot springs. I even met my wife Kate on a group backpacking trip in Glacier National

Park. I grew up in Michigan, but from the moment I set eyes on the mountains of Montana, I knew I would love it. I feel the same way about the La Crosse area, and I look forward to enjoying the many recreational activities in the region."

Dr. Sherwin Toribio: "I was born in Zamboanga City, a small town in the southern Philippines, where I finished my studies up to high school. For my undergraduate education, I attended the Ateneo De Manila University (ADMU – a university that is very much similar to UWL and home of the Blue Eagles!), where I finished my BS in Mathematics with a minor in Operations Research. Two years later, I got my MS in Biostatistics in Belgium and went back to the Philippines to teach as a Mathematics instructor at my alma mater.

During my 5-year stay in the Mathematics Department of ADMU, I attended to the other aspects of life and got married to my high school sweetheart☺. Five years ago, we moved to Ohio, where I got my second master's degree and my PhD in Statistics at Bowling Green State University. It was also in Bowling Green where my wife got her training in child rearing when we had our son.

As a person, I'm very friendly and enjoy meeting other people. So please don't hesitate to drop by my office. Everyone is welcome!"

NEW HOME FOR MATH TUTORING CENTER

Our Math Tutoring Center has a new home. The room that we had been using (Room 252 Cowley) has been turned back into a classroom. Our new Tutoring Center will be in Whitney Center. It is on the main floor next to the Sub Station. The schedule is online at :

<http://www.uwlax.edu/mathematics/tutorschedule.htm>.

CHANGES IN THE CALCULUS SEQUENCE

The Mathematics Department has made a change in the Calculus sequence. For the past several years, we have integrated differential equations and linear algebra into the second (208) and third (309) semesters of the calculus sequence. Last spring, the faculty decided to return to a somewhat more traditional approach. Calculus I (207) and Multivariate Calculus (310) will be essentially unchanged. Most of the differential equations and linear algebra topics will move into MTH 309, now called *Linear Algebra with Differential Equations*, and sequences and series will move back into Calculus II (208). Students will then have the choice of taking either MTH 309 or MTH 310 immediately after

MTH 208. Those of you who are currently in MTH 309 or 310 will complete the old sequence. The new MTH 208 begins this semester.

EMPLOYMENT OPPORTUNITIES FOR YOU

Do you enjoy helping your friends, roommates, classmates, etc. with their math homework? Would you like to get PAID for doing it?! The Mathematics Department has several opportunities for you to do just that. We are always on the lookout for good tutors to work in the Math Tutoring Center, but you may not be as aware of some other positions that are available. The Math Department hires students as:

- Tutors for the Math Tutoring Center
- Peer Graders
- Peer Teaching Assistants

You can also put your name on the Department's Private Tutor list which is given out to students looking for additional individual help. For more information on any of these programs, please ask your instructor or anyone in the Math Department. We're ALWAYS looking for good help!

PRAXIS PROJECT

A group of math and science faculty (led by our own Dr. Bob Hoar) has received a grant to produce web-based learning objects that are designed to help education students prepare for required exams. The grant will support student content developers and programmers. Keep an eye out for announcements relating to this grant and perhaps you could join a team that will be paid to research and publish these learning tools. Teams at various institutions around the state will work on this project. Current UW-L faculty participants include: Dr. Hoar, Dr. Kosiak, Dr. LeDocq, Dr. Skala, (Mathematics) and Dr. Gerber (Biology).

STUDENT ACTIVITIES

Lena Spargo, last year's Math Department Senior of the Year award winner, completed work on an undergraduate research project titled "*Developing a Logistics Growth Model for Methylmercury in Fathead Minnows.*" Lena worked with Dr. Hoar and Dr. Sandheinrich (Biology) to develop a model utilizing data collected by the River Studies group. Her results were presented in a twenty minute talk given at the Ninth Annual Celebration of Undergraduate Research and Creativity. The results also led to a paper that will be submitted to the UW-L Undergraduate Research Journal.

Sarah Rozner began working on a research project with Dr. Hoar this past summer. Sarah began investigating adaptive stencil finite difference methods which are used to find accurate approximations to the solutions of certain partial differential equations. The research will continue this year.

Craig Tainter, a double major in Mathematics and Chemistry was awarded an undergraduate research fellowship to work with Dr. Baggett on "Decryption of Chaotically Encrypted Signals Using Neural Networks." Craig presented the results of his work at the Pi Mu Epsilon Undergraduate Research

Conference held at St. Norbert's College in De Pere, WI as well as at the UW-L Undergraduate Research Day. Additionally, Craig submitted an article describing his work to the UW-L Journal of Undergraduate Research.

Dana Craker, a Mathematics Major with Emphasis in Statistics, was awarded an undergraduate research fellowship to work with Dr. Elfessi on "Attitude toward science of students enrolled in introductory level science courses at UW-La Crosse." Dana presented the results of her work at the NCUR meeting in North Carolina (National Conference for Undergraduate Research), as well as at the UW-L Undergraduate Research Day. Additionally, Dana submitted an article describing her work to the UW-L Journal of Undergraduate Research. Dana is currently in her first year as a graduate student in applied statistics at University of Nebraska-Lincoln.

STUDENT UPDATE: Tim Urness, a math/cs double major who graduated in 1999, recently received his Ph.D. from the University of Minnesota and has accepted a position in the Math and CS department at Drake University, located in Des Moines, Iowa. His dissertation is entitled "Texture-Based Visualization of Multi-Field Flow Data." Way to go Tim!!

BE INFORMED...CHECK OUT THE WEBSITE

The Mathematics Department website has lots of information and resources available for students. The site is located at:

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

On this website you will find links to the most up-to-date information on various topics including

- **Tutor Center and Tutor Schedule**
- **Weekly Coffees**
- **Upcoming talks**
- **Internships**
- **Faculty web pages**
- **UW-L Math Majors/Minors Guide**
- **UW-L Math Club**
- **Statistical Consulting Center**
- **Problem of the Week**

And MUCH MORE. Be sure to check it out on a regular basis!!

400 LEVEL COURSE OFFERINGS FOR SPRING 2007

In order to help you begin to plan your schedule for Spring 2007, 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 408 – Analysis II
- MTH 413 – Topics in Linear Algebra
- MTH 446 – Analysis of Variance and Design of Experiments
- MTH 448 – Operations Research
- MTH 461 – Mathematical Physics