

Math Musings

The Newsletter of
the Department of
Mathematics &
Statistics
Volume 14
June 2010

DEPARTMENT CHANGES NAME APPLIED MATH AND STATISTICS MAJORS APPROVED

Starting in the fall of 2010, the math department will offer new majors in applied mathematics and statistics, culminating several years of planning. The mathematics education program is also being revised. According to **Jeff Clark**, department chair, these changes will renew the department's commitment to serving all students in the program with a variety of interests. The department's name will now be the Department of Mathematics and Statistics to more fully reflect the programs being offered. These changes mean the department will support eight different majors rather than four, including the B.A. and B.S. in pure mathematics, the B.A. and B.S. in teacher licensure, the B.A. and B.S. in applied mathematics, and the B.A. and B.S. in statistics. Minors are also offered in mathematics, applied mathematics and statistics. **Jeff Clark** says, "I am excited to see growth in these programs both in terms of the number of students and the number of majors that we can offer." Currently there are 78 declared math majors including 25 graduating seniors. Three years ago, the graduating seniors in the department numbered fewer than 10.

APPLIED MATH MAJOR

Assistant Professor **Karen Yokley** spearheaded the creation of the applied mathematics major. Karen came to Elon in 2008 with an extensive background in the applied field, having a master's degree in applied mathematics and a doctorate in computational mathematics. She describes the new major as focusing on the development and study of mathematical descriptions of the physical world. Students majoring in applied mathematics will learn quantitative skills that will help them in almost any career involving problem solving. The major in applied mathematics requires less mathematical theory than the B.S. in pure mathematics, but students will have the opportunity to apply their mathematics knowledge to an outside area of study (such as physics, chemistry, biology, or economics).

STATISTICS MAJOR

The statistics program, first conceived by Assistant Professor **Ayesha Delpish** in 2005 as a minor, now offers two majors and is supported by three additional statistics faculty members. The statistics major will offer various concentration options designed to emphasize statistics both as a science unto itself

and as a powerful service field offering applications-based tools for disciplines such as mathematics, biology, environmental science, psychology, economics and other social sciences. The 42-44 semester hour B.A. degree reflects a liberal arts orientation and offers concentrations in the social sciences (economics, sociology, political science, and psychology), environmental statistics and bio-statistics. The B.S. degree requires 52-56 hours and supports students who are interested in a stand-alone statistics degree or who intend to pursue graduate studies in statistics or a related field. Concentration options for the B.S. are available in bio-statistics, mathematical statistics and actuarial science. Thus all levels of students are supported including those who plan to attend graduate school in statistics, pursue a job requiring statistical expertise, or increase their quantitative abilities. At the end of the program students will be poised to pursue jobs in business and industry (manufacturing, marketing, engineering, statistical computing), health and medicine (epidemiology, pharmacology, genetics), education and research (government, survey methods), social sciences (consulting, law) or natural resources (agriculture, ecology).

TEACHER LICENSURE

Associate Professor **Janice Richardson** led the effort to revise the mathematics education degree program to conform to the new guidelines from the North Carolina Department of Education. These guidelines were initiated to prepare 21st century professionals to lead North Carolina public schools and to follow the Department of Public Instruction's subsequent directive to revision NC teacher education programs to reflect new Standards for Teachers. As a result of the revisioning process, new courses were developed and/or added to the math with teacher licensure degree with emphasis on the following topics: assessment, technology with a separate one-semester hour course in mathematics technology, secondary teaching in 21st century classrooms, and exploration seminars. Recognizing that 21st century high school students graduates must globally compete for work and postsecondary education, the secondary mathematics program concentrates on *the new content standards* which emphasize conceptual knowledge, critical thinking, communication, problem solving, reasoning, representations, and connections.

BERNICE FOUST AWARDED STAFF MEMBER OF YEAR



Bernice Foust, affectionately known as “Math Mom,” was honored on May 28 during Elon's annual Staff Appreciation Day as Office Staff Member of the Year. Elon President Leo M. Lambert presented the award.

Bernice serves as Program Assistant for the Computing Sciences, Mathematics, and Sociology and Anthropology Departments. She began her employment at Elon in 1999, and her outgoing, friendly personality immediately endeared her to the faculty in Duke. She has been a real asset to the Math Department by assisting in the mountains of paperwork, planning events, arranging for interviews, and relieving the faculty of many clerical duties. She is the person with the answers about procedures, about whom to contact to resolve problems, and about how to perform many tasks. She has recruited and trained student workers over the years. She doesn't just assign them tasks but trains them and makes them part of our extended family.

In addition to her duties in the Computing Sciences, Mathematics, and Sociology and Anthropology Departments, Bernice has made significant contributions to the university. She ably served as secretary to Academic Council for several years. For the past five years, she has provided secretarial support for the Elon College Fellows program.

Bernice takes a personal interest in every faculty member. Not only is she good in performing all the jobs to make the program run smoothly, but she is also there for the faculty during times of happiness (marriages, babies, etc) and during times of grief (deaths in the family). She is professional in every sense of the word and a role model for us all. We congratulate Bernice on this well-deserved honor.

NEWS FROM OUR STUDENTS

Seniors **Amanda Brown** and **Christy Minor** presented at the Undergraduate Research Conference in Greensboro. Their topic was “Using Computer Simulations to Model Malarial Infections.” Amanda is a Lumen Scholar and recently took her second trip to Africa. Last summer she had an internship at the University of Houston to work in public health. She was featured on E-net for her Lumen Scholar research. Christy is an Elon College Fellow.

Four students gave talks in March at the Southeastern Section of the Mathematics Association of American held at Elon (see page 3). **Amanda Brown '10** and **Amanda Ketner '11** presented at the Student Undergraduate Research Forum. Amanda Brown's talk was titled “An Agent-Based Model of Insecticide Treated Nets and Their Impact on Malaria Endemic Populations.” Amanda Ketner spoke on “How Students Conceptualize Standard Deviation.” Amanda Ketner also presented the same talk at the U.S. Conference on Teaching Statistics held in Ohio.

Cindy Goodson '10 attended the Annual Conference of the North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA). Undergraduates rarely have the opportunity to attend this conference. She is an Honors Fellow and a Lumen Scholar. She presented at the North Carolina Conference for the Teachers of Mathematics about “Analysis of Middle School Students' Questions During Probabilistic Tasks.” She is getting married in July.

In May, four students were recognized in an award ceremony hosted by Elon College, the College of Arts and Sciences. **Joe Simmons '10** received an award for his academic achievement in mathematics, **Kelsey Johnson '10** and **Christy Minor '10** received the mathematics research award, and **Amanda Ketner '11** received the service award from the department.

The following seniors will attend graduate school next year:

- **Kelly Drayton** – N.C. State University in applied mathematics
- **Christy Minor** – full ride at N.C. State University in industrial engineering
- **Kelsey Johnson** – full ride at Duke University in engineering management with monthly living stipend
- **Amanda Brown** – University of Texas at Houston in public health
- **Tess Stempler** – Wake Forest University in computer science
- **Jaime Speiser** – full ride to Ohio State University in the Ph.D. Statistics program
- **Jaymie Shanahan** – University of South Carolina in biostatistics

Nine students were inducted into Pi Mu Epsilon, the honorary mathematics society: **Abigail Baumann '11**, **Elizabeth Bentley '11**, **Amanda Coe '11**, **Kelsey Davis '10**, **Amy Eubanks '11**, **Amanda Ketner '11**, **Kristen Koenig '11**, **Gregory Mader '11**, and **Matthew Marcum '10**.

Jenn Batchelor '10, who completed her course work for graduation in December, is now working for SAS in Cary.

ELON HOSTS SECTIONAL CONFERENCE

The 89th annual meeting of the southeastern section of the Mathematical Association of America was held on the Elon campus on March 26-27, 2010, which was jam-packed with talks, posters, and student activities. **Jim Beuerle, Crista Arangala, and Jeff Clark** did an excellent job of planning and executing one of the largest sectional meetings ever, with 552 participants from five states (Alabama, Georgia, North Carolina, South Carolina, and Tennessee).



The weekend program included three plenary talks. Betty Mayfield of Hood College (and former First Vice-President of the MAA) presented a talk on significant women mathematicians who were contemporaries of Euler. Ron Gould of Emory University presented connections between graph theory and marriage. The third plenary session involved two recipients of section teaching

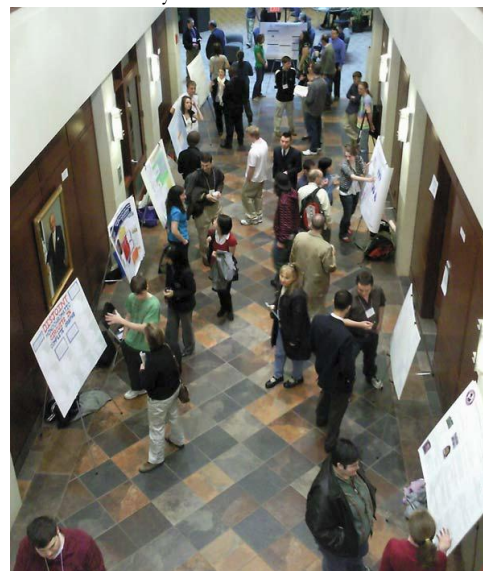


awards. Patrick Bahls, a math professor at the University of North Carolina at Asheville and the recipient in 2009 of the first award for Distinguished Teaching by a Beginning Faculty, began with a few remarks on the importance of trust in the teaching and learning of mathematics. He introduced Hugh Howards of Wake Forest University, the 2009 MAASE Section Teaching Award recipient, who talked on the interplay between graph theory and knot theory.

The participation by students was exceptionally strong this year. There were 31 Math Jeopardy teams, 53 undergraduate talks spread over 7 sessions, 16 undergraduate poster presentations, and 8 graduate talks. A treasure hunt was organized for Thursday night, and Friday morning began with the initial rounds of the Math Jeopardy competition which had the largest ever participation. The preliminary round was sold out. Thirty-two teams and over 100 students took part.

Not only was there an increase in student activity, but there was also a significant increase over past years of the number of faculty papers. This increase might be a consequence of so many undergraduates coming to the conference with their faculty sponsors.

On Friday the Graduate School and Career Fair was held. This year's fair saw participation by nine schools. The fair offered free pizza, a door prize, and a collection of mathematical puzzles and games. Student participation was high. The room buzzed with students, faculty, and potential employers discussing post-graduation options, and a stupendous amount of pizza (80) was consumed. Throughout the meeting, book displays were available for browsing on the mezzanine from the MAA itself as well as three sponsoring publishers. Saturday morning, there was an undergraduate poster session, at which 16 posters were presented and three prizes were awarded. There were three more special sessions, six contributed paper sessions, a second graduate paper session, and four more undergraduate paper sessions.



On Friday night, Elon University hosted a dinner in Moseley Center which included a mathematical trivia contest (designed by **Jim Beuerle, Kirstie Doehler** and **Laura Taylor**) using clickers, which led to a great deal of animated arguments across the tables. Students even stayed after dessert to finish the contest.

For the fifth year in a row, students presenting a paper at the conference were eligible to win the Patterson Prize. One winner was chosen from each session of undergraduate presentations. Elon senior **Kelsey Johnson** received the Patterson prize for her session. Senior **Amanda Brown** received a research award. Seniors **Christy Minor** and **Melissa Gaisser** also presented at the conference.

The meeting concluded with the Jeopardy finals, in which the University of South Carolina was victorious in Final Jeopardy.

(Excerpts taken from the Southeastern Regional MAA newsletter)

A BANNER YEAR FOR TODD LEE!



A longtime mathematics faculty member renowned for his infectious enthusiasm both inside and outside the classroom, **Todd Lee** is the 39th Elon faculty member to receive the Daniels–Danieley Award for Excellence in Teaching. The award was established by President Emeritus J. Earl Danieley '46 and his wife, Verona Daniels Danieley, in honor of their parents. He is the third math faculty member to receive this award, including Bill Barbee in 1973-74 and Richard Haworth in 1981-82.

Todd was also promoted to Professor of Mathematics this year.

Todd joined the Elon faculty in 1995 after completing his graduate work at Texas Tech University. There he was honored for his innovative approach to teaching, receiving Texas Tech's Mathematics Graduate Student Teaching Award in 1994. He brought a gregarious personality considered rare among typical mathematics faculty.

“When we hired Todd, we knew that we were hiring someone who was different,” say his mathematics colleagues. “Todd’s constant and enthusiastic efforts have helped create a pride in the work we do and excitement we feel

about our discipline.”

Todd, who serves as director of the Mathematics and Natural Sciences Fellows division of the Elon College Fellows, teaches a number of courses for interdisciplinary audiences in addition to advanced mathematics courses. These courses range from general studies requirements to prerequisites for several majors.

For one former student, it's Todd's focus on the process of mathematics as well as the answer to a problem that proves most beneficial. “He never tells you if you are right or wrong without showing him proof you are sure of your answer,” says the student. “It's never a simple ‘yes’ or ‘no’ but also a ‘why,’ which makes all the difference.” His mentorship of students – and colleagues – doesn't stop at the classroom door. A fixture of his department's weekly Math Teas, he engages students and faculty in conversations about their courses and research, as well as casual chats about music, movies, video games and more. He's cultivated a culture of “math love,” as his colleagues call it, and in return, students and faculty have designated him a “math god.”

A strong proponent of undergraduate research, Todd has mentored more than 30 students in their projects and encouraged countless more to submit their work to conferences. In the past year alone, he's served as committee chair or co-chair for four projects. “Todd has a knack for identifying our best and brightest and cajoling them into performing beyond their own expectations,” say colleagues in the mathematics department. “He doesn't take ‘no’ for an answer when asking students to go to conferences.”

Todd, who won the Elon College Excellence in Teaching Award in 2007, previously worked with students as faculty co-adviser for the Interdisciplinary Mathematical Contest in Modeling from 1999 to 2003 and the student chapter of the Mathematical Association of America from 1997 to 2002. This semester, he and his wife, Hollylynne, have been on a sabbatical to work joint research involving student learning of probability. Congratulations to Todd!

(Kristin Simonetti, Assistant Director of University Relations, contributed to this article.)



ALUMNI HAPPENINGS

David Scango '73 is the Assistant Dean (Program Head) for the Manassas Campus of Northern Virginia Community College (NVCC). NVCC has 66,000 students and is the largest college (or University) in the state of Virginia. It is the largest Community College in the country (surpassing Dade County just recently). He has taught there for 32 years.

David Chapman '75 has been retired for a number of years after working for an electronics company in Dallas. He just celebrated his 28th anniversary with his wife, Joyce. His daughter, Ashley, graduated from Texas Christian University in 2004 and will be married in October. His son, Ian, graduated from the University of Virginia in 2006 in math and physics and will enter grad school this year at Texas A&M.

Donna Phillips Shore '84 attained the APA designation (Accredited Pension Administrator) through the National Institute of Pension Administrators four years ago. She has been working as a Senior Pension Analyst with Southeastern Employment Benefit Services. She is living in Pfafftown N.C. with her husband and two children. She is the organist/pianist for Unity Moravian Church in Lewisville. Her son (8th grader) recently attended the state finals for the MathCounts competition at the School of Science and Math in Durham. He finished 3rd as individual in the Regional competition and did well in the State competition.

Rebecca (Becky) Moore '88 is a Senior Editor with Asset International, a publisher of various magazines and digital communications for institutional investors and sponsors of employee benefit and retirement plans. She writes for PLANSPONSOR and Planadviser magazines as well as the daily news desk on www.plansponsor.com and www.planadviser.com. She is also the managing editor for the 403(b) newsletter to sponsors and advisers of 403(b) retirement plans for government, church, and non-profit employers. She has two sons aged 21 and 19. She received a master's degree in mathematics from Wake Forest University in August 1989.

Cindy Enloe Neff '99 and her husband, Doug, welcomed a new baby, Heidi Ann, on May 23, 2009. She joins big brother Caleb. They live in Yadkinville, NC where Cindy is a homemaker.

Kate Mansi Merrill '00 and her husband, Jon, moved to Los Angeles where she is taking a hiatus from employment, since she is expecting her first child in June. She has been accepted into a doctoral program for Educational Leadership at UCLA and will begin classes in August. She received a master's degree in mathematics education from N.C. State University in 2003 and an Education Specialist (Ed.S.) in Educational Leadership from The George Washington University in 2007.

Lora Abernathy '01 and husband, Paul, welcomed son, Sean Davyn, on December 7, 2009. Sean joins big sister Olivia.

Rose Cordero '01 was recently married. She and her husband, Kevin, celebrated their wedding in Old San Juan, Puerto Rico at the end of January and their honeymoon in Thailand and Myanmar.

Katie Iwancio Lovin '03 was married on July 18, 2009, and finished her Ph.D. in math at N.C. State University in December 2009. Katie and her husband, Mark, are building a house in Clayton. She is currently working for WebAssign.

Jeanette Olli '03 has just completed her first year as an Assistant Professor at Dominican University in Illinois (in River Forest just outside of Chicago) and reports that her contract has been renewed for next year.

Adam Benjamin '04 finished his first year at the University of Florida where he is working toward a master's degree in Geomatics. He and his wife, Erica, welcomed the newest member of their family, Kai Knight Benjamin, on April 4th.

Kristin Yanulites '04 is attending Duke University to complete her M.B.A. after 5 years working in missile defense. She will graduate in 2011.

Patrick Davis '07 is teaching math and coaching baseball at Brevard High School. He and Katelyn Whitaker '07 will be married in July.

Laura Sinden '08 graduated from the Masters in Public Health program at Emory University with a concentration in epidemiology in May 2010. She has taken a job with the Center for Disease Control working as a statistician with the Division of Viral and Rickettsial Diseases. While she was a student, she worked with CDC looking at the health disparities in infectious disease in American Indians and Alaska Natives and studying the epidemiology of Kawasaki Syndrome.

Shelley Schad '09 is an Actuarial Analyst at Hartford Insurance Group in Hartford, CT. She is in a rotational actuarial development program where she is able to gain experience in several different business segments while working towards fellowship of the Casualty Actuarial Society.

Phillip St. Clair '09 is living in San Jose, CA and serving in an Americorps program called City Year. He is working with a team of nine people at a middle school in the East Side of San Jose (one of the most troubled) and is running math tutoring during the school day and an after school program in the afternoons. Combining literacy tutoring and math tutoring, they are trying to decrease the high school dropout rate by giving students positive role models and academic stimulation in the schools that feed those troubled high schools. He is teaching his students the Japanese art of paper folding, a skill he learned from Dr. Alan Russell.

NEWS FROM THE FACULTY

Karen Yokley and her husband, Nick Luke, bought a house in Whitsett last year. He is now an assistant professor in the math department at North Carolina A&T University. In November she participated in a seminar for math undergraduates at High Point University on using differential equations in biology applications. She also participated in a career panel at a meeting of the North Carolina Society of Toxicology.

Alan Russell is a scholar for the Center for the Advancement of Teaching and Learning. He is doing research with Amanda Ketner, a junior math major, on how students learn and understand standard deviation in statistics. Alan presented this research at the National Council of Teachers of Mathematics conference in San Diego. At the same conference **Jan Mays** and Alan presented a talk titled "Creating a Pre-Service Math Content Class Focusing on Problem Solving." In July 2010 Alan will have an article titled "A Model for Undergraduate Research in Statistics Education" published in the *International Journal of Teaching and Learning*. He taught a general studies course this spring called Life Stories which was developed by retired chaplain Richard McBride. Alan's daughter, Michelle, is completing the sixth grade and is in the band learning to play the clarinet.



Kirstie Doehler gave talks to public school teachers in Northern Guilford with a statistical focus. She graded AP statistics exams in 2009 and participated in the Elon Teaching and Learning Program. She and her husband bought a house in Elon. Her husband teaches science at High Point Central High School. They are expecting their first child in August.

Laura Taylor is getting married on August 7 in Raleigh to Chris Baysden, a reporter for the *Triangle Business Journal*. They enjoy kayaking and camping together. Kirstie and Laura held a workshop last summer for the Elon Math Department on Randomization Techniques for an Introductory Statistics Class.

Janice Richardson traveled to Peru last summer and to London during Christmas. She and **Ayesha Delpish** presented at the International Conference of Service Learning in Ottawa, Canada on "Service Learning in Mathematics: Statistics and Education." She also presented at the Gulf Summit service learning conference in Athens, GA. on a homework hotline project in math methods. Her daughter, Bonnie, has moved to Charlotte and is working in human

resources for Deloitte and Touche. Her son, Paul, is a funeral director at Rich and Thompson in Burlington.

Crista Arangala taught a winter term course in India. She and 21 students made a traveling science museum which was shown to Indian children. The exhibits were left in India. Next year she is going to Sri Lanka with Project Pericles and is planning an environmental summit there. She and her students will sponsor an environmental club in India and build storage facilities at a school so the current storage room can be used for a library. Her students will be fundraising to get books for the library. Last July she gave a talk at Math Fest in Portland titled "Turning Lights Out." She and her husband have bought a new home in Chapel Hill.

Lisa Beuerle just completed her final year as first year coordinator in the math department. In the summer 2009, she graded AP statistics exams in Louisville, KY. She will be an AP reader again this summer in Daytona, FL. **Lisa, Jan Mays, Alan Russell and Kirstie Doehler** presented at two TEAMS (Teachers Empowering All Mathematics and Science Students) workshops in January and March 2010. The workshops were funded by a federal grant and served 82 K-8 teachers from three surrounding counties. Lisa ran and completed her first marathon in March 2010. She ran the Tobacco Road Marathon in Cary, N.C. and hopes to qualify for the Boston Marathon in the future.

Jan Mays serves on the Phi Beta Kappa members-in-course committee.

Ellen Mir is leaving Elon to pursue a degree in biostatistics at UNC-Chapel Hill. Her husband David received a master's degree in Information Science from UNC and has a two-year fellowship at the library at N.C. State University.

Ayesha Delpish along with Hui-Hua Chang in the history department went to Greece during winter term with 30 students studying ancient history. This summer she will be a visiting scholar with the Educational Testing Service in New Jersey working on fairness issues. At Elon, she worked on Elon's Gender Equity Study with Rob Springer and Mark Kurt to determine whether there were gender pay differences, and no significant difference was found. She served on the Physician's Assistant Feasibility Committee, Graduate Council, Faculty Research & Development Committee, as well as on search committees for the Associate Provosts and the General Studies Director. She is also on the advisory committee for the Center for the Advancement of Teaching and Learning (CATL). As a 2009-2011 CATL scholar she will investigate how students solve statistical problems. She presented at the US Conference on Teaching Statistics on incorporating service learning into statistics courses, and published two articles. She completed a contract with the Alamance-Burlington School System to norm their K-5 data. Jaime Speiser, an Elon College Fellow, worked with her to complete and present the analysis results, which included a 90 page report. Ayesha also teaches Education Measurement and Research in the M.Ed. program. Her husband Ritson will finish his Ph.D. dissertation next fall.

MORE NEWS FROM FACULTY

Jim Beuerle serves on Academic Council. He is also a member of the Physician's Assistant Feasibility Committee, maintains the department's website, advises the math honor society Pi Mu Epsilon, and directs the Elon High School Mathematics Contest. He was also chair of the North Carolina State Mathematics Contest. He is the new MAA-SE Webmaster (Jeff Clark's former position) and participated in grading the 2009 AP Statistics exam. His huge accomplishment this year was planning and organizing the MAA Southeastern Regional Conference which was held at Elon this year (See page 3).

Jeff Clark has been serving as chair of the curriculum committee. He has also served as webmaster for the Southeastern Section of the MAA for seven years. A new edition of his book, *EZ Statistics* (fifth edition), was published this year. His son, David, is a seventh grader and a Boy Scout. His daughter, Elizabeth, is completing the fourth grade.

Skip Allis has been a member of the faculty governance committee. Four of the committee's proposals were accepted by the Board of Trustees. These proposals will change the format of faculty meetings. Skip is taking classes at UNC-G toward a Ph.D. in higher education. He hopes to finish in two more years. He is the new freshman core coordinator for the department.

Retired professor **Richard Haworth** has been doing extensive traveling. He and his wife, Judy, are planning a trip to Alaska in June. In August he and his younger brother will travel to Iowa on their motorcycles to attend the National Hobo Convention, and then they will proceed to Minnesota to see the mouth of the Mississippi.

Richard Haworth reports that retired math professor **Bill Barbee** recently had a reunion with basketball players from his former team at Wofford College. Bill was the number-one player all four years at Wofford and still holds the record for career free throw percentage. Bill is now living on family land where he is in walking distance of his home place. Bill's basketball goalpost is still on the property, and Bill encourages his grandchildren in the sport.

ELON AWARDED PHI BETA KAPPA CHAPTER

On April 13, 2010, the North Carolina Eta Chapter of Phi Beta Kappa was installed on campus during a university-wide convocation featuring two-time Pulitzer Prize winning columnist Nicolas Kristof. In an evening ceremony, 47 students from the College of Arts and Sciences were inducted into the first class of the Elon chapter. Seven of these students are majoring in math: **Jen Batchelor, Amanda Brown, Parker Cramer, Kelsey Davis, Melissa Gaisser, Cindy Goodson, and Joe Simmons**, representing one of three departments with the highest number of PBK inductees. The math inductees include two Honors Fellows, three Teaching Fellows, two Lumen Scholars, and one Periclean Scholar.

Math faculty member **Helen Walton** received a faculty excellence award from the College of Arts and Sciences for her role in writing the application, organizing the site visit, and preparing various reports which led to the affirmative vote for Elon's new Phi Beta Kappa chapter. She has been working on the initiative for almost ten years and now serves as Secretary, Treasurer, and Historian of the new chapter.



NEW FACULTY MEMBER

In response to the growing popularity of statistics, **Dr. Erdenebaatar "Aggie" Chandraa** was hired as a lecturer in statistics last fall. A native of Mongolia, he comes to Elon after receiving his master's and doctorate degrees in statistics from Colorado State University. He also received a bachelor's and master's degrees from the National University of Mongolia. His research interest is modeling stock market volatility. He is writing a textbook in statistics in the Mongolian language. He is going to Mongolia this summer to work on the publication of the book and to present at the International Conference on Optimization, Simulation, and Control. He has been married for 11 years to Tugso, a native of Mongolia. They have three children aged ten, eight and five months. They recently purchased a house at Lake Macintosh in Burlington.

MATH PUZZLER

Here is a problem from **David Chapman '75**:

A basketball player is shooting foul shots at under 80% early in the season. In the course of the year he improves to better than 80%. In the process of shooting below to above 80% must he shoot exactly 80% at one point?

This is not a rhetorical problem. Send solution to David at ptbyb@tx.rr.com. The winner will receive a gift certificate to Zack's.

NEED E-MAIL ADDRESSES

Each spring we contact all Elon math alumni by e-mail to seek news for this publication. However, we have the e-mail addresses of only half of the Elon math graduates. Please send us your e-mail address so you can be a part of our network. Send it (and any news) to Helen Walton in the math department at walton@elon.edu. We continue to circulate your responses to the math faculty and our retired faculty.

CHECK OUT OUR WEB PAGE

To find out the latest information about the math department, see our photos, and get our email addresses and phone numbers, check our web site at <http://math.elon.edu>.

This newsletter is a production of the mathematics department at Elon University.

Helen Walton
Newsletter Editor
CB 2320
Elon, NC 27244
Telephone 336-278-6242
walton@elon.edu

Department of Mathematics and Statistics
Jeff Clark, Chair
CB 2320
Elon, NC 27244
Telephone 336-278-6248
clarkj@elon.edu

Department of Mathematics and Statistics
2320 Campus Box
Elon, NC 27244

Non Profit Organization
U. S. Postage
PAID
Permit No. 1
Elon, NC 27244