PROGRAMES RECEIVE NATIONAL RECOGNIZATION

Ashland University’s undergraduate Integrated Mathematics and Bachelor’s Plus mathematics programs have been awarded the National Council of Teachers of Mathematics (NCTM) National Recognition. To be eligible for the honor, a university must provide evidence of candidate mastery of SPA standards – a set of professional standards and indicators for mathematics programs.

There are 16 standards in which candidates preparing to be licensed mathematics teachers must excel: Process Standards: Knowledge of Mathematical Problem Solving, Knowledge of Reasoning and Proof, Knowledge of Mathematical Communication, Knowledge of Mathematical Connections, Knowledge of Mathematical Representation, Knowledge of Technology and Dispositions Pedagogy: Knowledge of Mathematics Pedagogy Content: Number and Operation, Different Perspectives on Algebra, Geometries, Calculus, Discrete Mathematics, Data Analysis, Statistics, Probability, Knowledge of Measurement and Field-Based Experiences

Mathematics teacher preparation programs have been reviewed since 1982. The review process has been updated in September 1989, September 1993, October 1998 and October 2003.

DR. CATHY STOFFER BIDS ADIEU

After 28 years at Ashland University, Dr. Cathy Stoffer, associate professor of mathematics, will be retiring at the end of the Spring 2013 semester.

Dr. Stoffer began her teaching career in 1971, teaching seventh and eighth grade math in the Wooster City School district. In 1980 she accepted the position of mathematics instructor for Ashland Academy, a private high school that was once here on campus. In the four years she taught for Ashland Academy, she also worked as an adjunct professor, teaching MATH 100: Developmental Math, which prepares students for Calculus and Statistics.

During her tenure at Ashland University, Dr. Stoffer has taught a variety of mathematics courses, including Developmental Mathematics, Mathematics for Elementary Teachers I and II, Calculus and Analytical Geometry I and II, Teaching Secondary Mathematics, Geometry for Middle Grades and Mathematics Senior Seminar.
STUDENT NEWS

COMPETITIONS

ACM-ICPC East Central North America Regional Programming Contest

Three teams from AU participated in the 2011 ACM contest in the East Central North America Region (ECNA RPC) at the Youngstown site. ACM is an international collegiate programming contest. The ECNA RPC draws students from colleges and universities throughout western Pennsylvania, Ohio, Michigan, eastern Ontario and Indiana (excluding the Greater Chicago Metropolitan Area).

Winners selected from the ECNA RPC advanced to the ACM International Collegiate Programming Contest (ACM-ICPC) World Finals. Prizes, scholarships and bragging rights were at stake for some of the world’s finest university students of the computing sciences and engineering.

Team au_purple solved two out of the nine problems and ranked 40 out of 122 in our region. Team au_gold solved one out of the nine problems. The competition is open to sophomores, juniors and seniors. Four freshmen attended the competition as observers.

The participants were:

John Bentley Anna Payne
Thomas Conti Patrick Shehan
Kees Edwards Matthew Smithburger
Jim Huang Marissa Uhrig
Allen Kowal

Observers: Kyle Grimms, Cameron Goodson, Joseph Hemperly and Gabriel Maurer

2012 MAA Mathematics Contest

In April, six mathematics students competed in the annual statewide mathematics contest at the Spring meeting of the Ohio Section of the Mathematical Association of America. Sponsored by Dr. Thomas Dence, the following students participated in the Leo Schneider Student Team Mathematics Competition: John Bentley, Alicia Metzger, Katelyn Mittelsteadt, Caitlyn Music, Anna Payne and David Rodriguez.

William Lowell Putnam Competition

On December 3, Polly Widmer, Anna Payne and Caitlin Music represented AU at the 2011 William Lowell Putnam Competition. Dr. Christopher Swanson directed the students.

The William Lowell Putnam competition is an annual competition open to undergraduates throughout the United States and Canada. This year, 4,400 students participated. The competition was founded by Elizabeth Lowell Putnam in memory of her husband, William, who was an advocate of intercollegiate intellectual competition. Since 1938 the Mathematical Association of America has administered the competition.

The test consists of 12 questions that can be solved using basic math skills. However, to get a correct, complete answer, extensive creative thinking and problem-solving are required. Each question is worth 10 points. Partial credit can be earned – nine points for a near complete solution and one point for the beginnings of a solution. The test is very difficult and the median score of all participants is a two.

Senior Polly Widmer and Junior Anna Payne both received non-zero scores. Polly received a score of 2 and Anna received a score of 1. Of the 4,400 students that participated, 2,067 received scores of 0, 911 received scores of 1, and 293 received scores of 2. Thus, Polly did better than 67.1% of students taking the exam and at least as well as 73.7% of students taking the exam. Anna did better than 46.6% of students taking the exam and at least as well as 67.1%.

Cara Whitcomb Smith ('11) remains AU’s top scorer at 12. Andrew Rowe ('10) holds the record for highest percentile rank, doing better than 76.2% of students taking the exam and at least as well as 82.7% of students taking the exam.

Scholarship prizes are awarded for top student scorers and top school scorers. Prizes for students range from $500-2,500 and for schools $5,000-25,000. This year’s top teams were: 1.) Harvard; 2.) Carnegie-Mellon; 3.) Cal Tech; 4.) Stanford; and 5.) MIT.

The ACM teams prepare for the programming contest.
Student News

Good Luck Graduates

December 2011 and May 2012

John Bentley  Joseph Gandert  Alayna Ruggles
Anthony Boytim  Andrew Iden  Polly Widmer
Rylan Campbell  John Palazzo  David Woods
Brandon Davis

Graduating seniors were recognized at the Honors Reception.

Welcome Class of 2016

Thirty-eight freshman and transfer majors and minors have joined the department:

Jacob Ackerman  Jessica Loyer
Abdullah Aldhfyen  Emily Marconi
Nara Almutairi  Cameron May
Andrew Ault  Cameron Miller
Jacob Browning  Dylan Moats
Andrew Byrd  Joseph O’Neil
Meghan Cunningham  Dustin Porter
Brent Fickel  Adam Ray
Brett Garand  Austin Renner
Mackenzie Hampshire  Taylor Riedy
Ashley Herman  James Roland
Danielle Himler  Emily Sparks
Lucas Hunt  Haley Spaulding
Leon Kinsley  Derik Swinderman
Avin Klinger  Mary Theus
Alexandra Kovarik  Brittney Thorne
Megan Lau  Garrett Tresch
Yochheim  Jesse Utt
Aaron LeMaster  Kassidy Yochheim
Alexander Lillich

John Bentley was presented with the Outstanding Senior award at the Mathematics and Computer Science Academic Awards and Activity Reception held on April 18.

John's academic achievements, hard work and dedication to the department earned him this prestigious honor.

John graduated on May 5 with a Bachelor of Science in computer science and a minor in mathematics.

Congratulations, John!

Honsors Reception

The 2011-2012 Academic Awards and Activity Recognition Reception was held on April 18. Faculty, students and scholarship donors gathered to recognize the accomplishments of students within the mathematics and computer science department. Students were recognized for their academic successes and outstanding accomplishments. Awards given out included: outstanding calculus student, outstanding discrete mathematics students, outstanding introductory computer programming student and outstanding sophomores, juniors and senior. Student groups, presentation participants, contest participants, peer tutors and graduates were recognized as well. The department also recognized the following endowed scholarships:

Dr. Donald Buckeye  Alan G. Poorman
Dorothy Carpenter  Stanton Rupert
Richard A. Good  Ruth Tipton
James & Helen McConaghy  Robert & Kathleen Wendling
Actuarial News

Three Actuarial Science majors are well on their way to becoming Actuaries.

Senior Makenzie Sauder has passed the Society of Actuaries’ Financial Mathematics exam. Makenzie has been honored for her academic achievements in the department, including being selected as an Outstanding Calculus student and Outstanding Discrete Mathematics student. In May 2012, she was inducted into the mathematics honorary, Pi Mu Epsilon.

Senior Donald Dottei has also passed the Financial Mathematics exam. Donnie has been honored for his academic achievements as a freshman, sophomore and junior. He is actively involved in the department as well as on campus. He is past president of Pi Mu Epsilon and he plays on AU’s football team.

Senior Candace Goodson has passed the Probability exam. She has already passed the Financial Mathematics exam and is planning on taking the Models for Financial Economics exam or the Models for Life Contingencies exam later this fall. Candace transferred to AU last year.

Alumnus Andrew Iden (‘12) has passed the Probability exam. Last summer he also passed the Financial Mathematics exam. Andrew recently accepted a position as an Actuarial Analyst for Assurant Specialty Property in Miami, Florida. Congratulations and good luck to Andrew.

Actuaries are professionals who provide expert advice and relevant solutions for business and societal problems that involve economic risk. The actuarial profession is consistently ranked as one of the top five careers in the United States.

Internships

In today’s highly-competitive job market, it’s important to have career-related experience to stand out among others. Students are encouraged to complete an internship during their junior or senior year. An internship provides an experience where you can apply your classroom knowledge to real-world situations. The biggest advantage? Creating a competitive edge in the job market; you will have concrete experience to discuss in future job interviews. Internships provide many other benefits such as immersing yourself in the field and deciding if it is right for you, networking opportunities, developing references and your resume, as well as building your confidence. To find an internship position, students can go through the university’s Career Services or find positions on their own.

Several department majors completed internships over the summer.

Morgan Mirtes, a junior double-majoring in mathematics and computer science, interned at NASA Glenn Research Center in Cleveland as a SCanN Summer Intern. Morgan worked with the software and development team in the Space and Communications department. Her responsibilities included web design for a portal site that will be used for communication between NASA’s space networks and their missions.

Kenneth Bogner, a junior computer science major, interned at Bird Technologies in Solon. As a Software Engineering Intern, Kenneth used the programming language of C and C++ to solve problems in various projects for the company. He assisted in developing Bird products from each project. To do this, he worked with embedded programming, the computer programming language that lives in and operates computer-controlled devices of that product. During the academic year, Kenneth is the department’s student administrator of the UNIX lab.

Jim Huang, a senior majoring in computer science, interned as a Software Development Intern at Quicken Loans in Cleveland. Jim’s main responsibility was to design and improve the company’s back-end loans platform. Through this position, Jim was able to learn more about the software development process and cycle in a business world environment.

Matthew Smithburger, a senior computer science major, completed his internship with Rosetta Marketing in Cleveland. In his position of an Interface Development Intern, Matthew used front-end technologies to build interactive web pages and applications for clients. “This position showed me that this is what I want to do in the future,” said Matthew.

Thomas Conti, a senior computer science major, worked as an Automated Testing Environment Engineering Intern for AMD in Austin, Texas. During his internship, Thomas created and enhanced programs used in testing different AMD processing products. In this position, he learned more about the fabrication and testing process for microprocessors.

These students all interned at different companies and in different types of positions, but they all had one thing in common to say about their positions: the professors and classes here at Ashland University gave them the knowledge they needed to succeed in their positions.
## Student Research

### ANNA PAYNE GAINS VALUABLE RESEARCH EXPERIENCE

Senior Anna Payne participated in the Summer Undergraduate Mathematical Science Research Institute (SUMSRI) at Miami University in Oxford, Ohio. Anna found the program through the Research Experience for Undergrads list on the National Science Foundation website. She was one of 17 applicants chosen for the program. SUMSRI is an intense mathematical research program that pushes students to learn more about advanced topics in math and explore different ways of solving problems. The program is an opportunity for the students to see what mathematical research is really like.

In the program, students were split into groups: Discrete Math/Graph Theory, Algebra and Statistics, and each group had to research mathematics topics. Anna was chosen for the Discrete Math/Graph Theory group and, along with her teammates, conducted graph theory research on tournaments. They worked to prove conjectures given in other papers about transitive tournaments. (In the mathematical field of graph theory, transitive tournaments are directed, complete graphs with particular properties. Their name is derived from the fact that each one of these graphs can be thought of as the results of a round robin tournament in which if Team A beat Team B and Team B beat Team C, then Team A beat Team C.) In the final week of the program, the team wrote up their results in a formal paper and made a final presentation.

“Our research was pretty successful, and we have proved several things that had not been proven before,” said Anna. “The program has definitely helped me grow as a mathematician. It is great working with people who have similar interests and a passion for mathematics. Everyone here, including myself, is serious about their pursuits in mathematics.”

Along with the research projects, students in the program were offered short courses in abstract algebra, real analysis, mathematical writing and GRE preparation during the program. These were challenging courses, but gave the students an opportunity to learn even more about mathematical research.

Anna plans on graduating with a double major in integrated mathematics and mathematics with a minor in computer science. After graduation from AU, she plans to go to graduate school for mathematics or applied mathematics.

## Student Presentations

Ohio Section of the Mathematical Association of America

Several students traveled to Xavier University to participate in the 2012 Spring Meeting of the Ohio Section of the MAA. The meeting was held April 13-14.

The following students, sponsored by Dr. Gordon Swain, presented contributed talks at the meeting:

- **Larissa Berry** – “The Last Stone Standing”
- **John Bentley** – “The Prime Detective”
- **Caitlin Music** – “Stop or Go?”
- **Anna Payne** – “Let’s Make a Deal: Probability of a Popular Game Show”
- **Bradley Sekas** – “Can Counting Cards Win You Money?”

\[\text{Dr. Young, Dr. Swain, Dr. Swanson, Dr. Dence and students pose outside the Conaton Learning Center at Xavier University.}\]

### URCA Present, Exhibit, Perform!

The Third Annual College of Arts & Sciences Symposium on Undergraduate Research and Creative Activities was held on March 27. This annual event provides students in The College of Arts and Sciences the chance to present the results of independent study projects, thesis work, term papers or literary analysis, exhibit their artwork or give literary readings, musical or theatrical performances in a professional setting. Students have 10-15 minutes to give an oral presentation, poster presentation, art exhibition or performance. This year’s event was held in the John C. Myers Convocation Center. The Symposium gives presenters and attendees the opportunity to learn about the work of other students throughout the diverse departments in The College of Arts and Sciences.

(Continued on page 6)
URCA (continued from page 5)

Project 1: Cohort of Games – Game Design with Dark GDK
Sponsored by: Dr. Paul Cao
The following games were presented:
“Mouse Madness” by Anna Payne
“Little Red Plumber” by Rylan Campbell
“Blackjack” by Allen Kowal
“Rockem Sockem Robots” by Kenny Bogner and Kees Edwards

Project 2: Final Project for CS 499 Software Development
Sponsored by: Dr. Iyad Ajwa

Project 3:
Sponsored by: Dr. Vickie Van Dresar
“Lines, Diagrams and Duals! Oh, My!” by Nick Painter

STUDENT GROUPS

UPE
A Brief History: Upsilon Pi Epsilon (UPE), an international honor society for the computing and information disciplines, was first organized at Texas A&M University in 1967. Today, this international organization consists of chapters at colleges and universities throughout North America and overseas. UPE is the first and only existing international honor society in the computing and information disciplines. The mission of UPE is to recognize academic excellence at both the undergraduate and graduate levels in the computing and information disciplines.

Ashland University’s Epsilon Chapter was formed in January 2002. Sophomore, junior and senior computer science majors who meet the eligibility requirements are invited to join this prestigious honorary.

On November 7, 2011, five new members were initiated:
Kenneth Bogner, Thomas Conti, Jim Huang, Matthew Smithburger and Marissa Uhrig. Senior Matthew Smithburger has assumed the duties of president.

PME
A Brief History: Pi Mu Epsilon (PME) is the national mathematics honorary society. Founded on May 25, 1914 at Syracuse University, PME currently has over 350 chapters at colleges and universities throughout the United States. The purpose of the society is to promote scholarly activity in mathematics among the students in academic institutions.

Ashland University’s Ohio Rho Chapter was formed in April 2002. Sophomore, junior and senior computer science majors who meet the eligibility requirements are invited to join this prestigious honorary.

On April 18th nine new members were initiated: Colleen Atchley, John Bentley, Larissa Berry, Mei Li, Alicia Metzger, Caitlin Music, Megan Raber, Alayna Ruggles and Makenzie Sauder. Officers for 2011-2012 were: Donald Dottei, President, Andrew Iden, Vice President/Treasurer, and Anna Payne, Secretary.

Problem-Solving Group
A Brief History: In the fall of 2011, Dr. Gordon Swain formed the Ashland University Problem Solving Group (PSG). The group met regularly throughout the academic year to discuss and attempt to solve mathematical problems posed in scholarly journals.

The group submitted solutions to several journals and was recognized for solutions in February, April and September 2012 issues of Math Horizons, and the Spring 2012 issue of the PME Journal. Additionally, Math Horizons highlighted the solutions provided by AU PSG in its April and September issues. Congratulations to the following members of the AU PSG:
John Bentley David Rodriguez
Stacee King Emma Vandenberg
Anna Payne Polly Widmer
Megan Raber David Woods

Anna Payne, who recently participated in an undergraduate research program, acknowledged that her membership in Ashland University’s Problem Solving Group (PSG) had also helped her in the program.

“PSG teaches us to think differently about problems and use a variety of methods to handle seemingly difficult problems. For me, that was very useful because a lot of times the method of solving a problem is not immediately obvious.”
This fall PSG will be meeting Mondays 5:30-7 p.m. The only requirements for membership are interest and commitment to attend at least four meetings. Keep on problem-solving!

**ACM Student Chapter**

*A Brief History:* The Association of Computing Machinery (ACM) is an educational and scientific society uniting the world's computing educators, researchers and professionals to inspire dialogue, share resources and address the field's challenges. ACM strengthens the profession's collective voice through strong leadership, promotion of the highest standards and recognition of technical excellence. ACM supports the professional growth of its members by providing opportunities for life-long learning, career development and professional networking.

The ACM was founded as the Eastern Association for Computing Machinery at a meeting at Columbia University in New York on September 15, 1947. Its creation was the logical outgrowth of increasing interest in computers as evidenced by several events. In January 1948, the word “Eastern” was dropped from the name of the Association. In September 1949, a constitution was instituted by membership approval.

The student chapter at AU began over 20 years ago. Dr. Paul Cao, advisor for the group, assists students in preparing for the ACM competitions. In addition to the competitions, the group meets every two weeks for socializing and fun. All students are welcome; there are no membership dues.

This year’s officers are:

- **Matthew Smithburger**, President,
- **Thomas Conti**, Vice President, and
- **Jim Huang**, Secretary.

**MAA Student Chapter**

The Math Club (Mathematical Association of America Student Chapter, MAA) had a busy year, meeting every two weeks with 10-20 students. At most meetings we played math-related games, but also had themed meetings such as Thanksgiving pumpkin carving, Pi-day and an Easter Fibonacci theme. At the Fibonacci meetings, we looked at his original introduction of the “rabbit pairs” problem that lead to defining the well-known Fibonacci numbers; then, we explored how this would change if the rabbits didn’t live forever. We determined that if the rabbits mature in one month, then reproduce each month for 3 months before they die, then the number of pairs of bunnies each month (starting with one young pair) are 1, 1, 2, 3, 4, 6, 9, 13, 19, 28, etc. After working on this at the next PSG meetings also, we were able to prove that these numbers should satisfy the relation $T_{n+1} = T_n + T_{n-1} - T_{n-4}$ after the fifth term.

New Math Club officers for the 2012-13 year are:

- **Anna Payne** (President), **Jenny Evans** (Vice-President),
- **Stacee King** (Secretary), **Kylee Ziegler** (Treasurer) and
- **Emily Marconi** (Freshman Representative).

Faculty advisors are:

- **Drs. Gordon Swain** and **Christopher Swanson**.

**MAA Chapter**

*A Brief History:* It all began in 1894 with the American Mathematical Monthly - and ever since, the MAA has been providing mathematicians with the best expository articles, engaging problems and articles devoted to teaching collegiate mathematics. In 1915, the organization officially became the MAA. Now, it is more than 20,000 members strong, made up of faculty, students, practitioners and people who simply love math. Most important of all, they are colleagues.

The Mathematical Association of America is the largest professional society that focuses on mathematics accessible at the undergraduate level. Our members include university, college and high school teachers; graduate and undergraduate students; pure and applied mathematicians; computer scientists; statisticians; and many others in academia, government, business and industry. We welcome all who are interested in the mathematical sciences.

The student chapter of MAA here at Ashland was chartered in 1990.
**FACULTY NEWS**

**DR. CATHY STOFFER**

**BIDS ADIEU** (continued from pg 1)

“Developmental Mathematics is one course I particularly enjoy teaching,” says Dr. Stoffer. “The structure of the course allows me to give individualized instruction to all my students.”

Dr. Stoffer not only dedicated herself to her students, but also to the mathematics and computer science department here at Ashland University. She served as chair of the department from 1998 through 2001 and stepped up as acting chair in the Spring semester of 2006. In 2005, Dr. Stoffer was promoted to associate professor of mathematics. Wanting all students to do well in their mathematics and computer science courses, Dr. Stoffer developed a drop-in peer tutoring program for those needing some extra instruction outside of the classroom. Working with the Provost, she set up a TI-84 Calculator Loan Program, in which students can borrow a calculator from the department for the entire semester at no charge. When she was chair, she organized the department’s first Honors Reception, an event now held every spring honoring the academic successes of the department’s majors.

The areas of mathematics education and early childhood, middle grades and adolescent-to-young-adult teacher preparation have always been of particular interest and specialization for Dr. Stoffer. She has presented her research on the areas at the state, regional and national levels as well as conducted several workshops, such as sessions on integrating mathematics into other content areas and improving teaching methods in the middle grades. She also attended numerous meetings, conferences, workshops and contests, always wanting to learn new, innovative ways to teach students.

Dr. Stoffer has been a member of the Mathematical Association of America (MAA) and the Ohio Section Mathematical Association of America since 1984, the Ohio Mathematics Education Leadership Council and the Ohio Council of Teachers of Mathematics (OCTM) since 1988 and the National Council of Teachers in Mathematics since 1990. Over the years, she has held a variety of positions within these organizations including being a member of the state executive board of the OCTM from 2002-2012. She served as the assistant director of the OCTM State Tournament of Mathematics from 2008-2009 and took over as director from 2009-2012.

Continuously striving to give back to the profession that has brought her so much enjoyment, Dr. Stoffer has assisted with writing grants, helping many area school districts. In 2000, she was one of the recipients to receive a $60,000 Eisenhower Grant for integrating mathematics and science in the middle grades for the Lorain County Schools. In 2003, she worked with the East Holmes Local School district as part of a grant for The Natural Link, which provides professional development in inquiry-based instruction. In 2008, she was one of the recipients of an Improving Quality Grant from the Ohio Board of Regents to provide mathematics and science instruction for middle grade teachers for the Mansfield City School district. Dr. Stoffer has also participated in grants for AU as well. In 1999 she received a New Dimensions Project Grant for incorporating the TI-73 calculators into MATH 218: Geometry for Middle Grades Teachers, and in 2001 she participated in the TIMS grant for incorporating discovery learning into mathematics and science classes. Dr. Stoffer also wrote the mathematics portion of a grant request to the U.S. Department of Education for the addition to the Kettering Science Center.

Dr. Stoffer received a B.A. in mathematics and a Secondary Teacher Certification in mathematics and economics from Ashland College (University) in 1970. In 1991, she received her M.A. in mathematics from John Carroll University and in 2004 completed her Ph.D. in curriculum and instruction with emphasis in mathematics education from Kent State University. Her dissertation was titled “Early Childhood Licensure Programs and Middle Childhood Mathematics Concentration Licensure Programs in the State of Ohio: Are They Meeting the National Council of Teachers of Mathematics Standards and the Conference Board of Mathematics Sciences Recommendation?”

Dr. Stoffer and her husband, Richard, a professor of biology, reside here in Ashland. They have two grown children, Michael (Shanna) and Deborah, and two grandchildren, Kaley and Colton. During her retirement, Dr. Stoffer plans on spending more time with her grandchildren, dedicating more time to her hobbies: gardening, camping, reading and volunteering in the community as a math tutor at Montgomery Elementary School. She would also like to donate time helping out at the Pumphouse Ministries and the Cat House Sanctuary. In a few years, after her husband retires, she would like to travel to the United States. At the top of her list are a trip along the west coast and a trip to the Hawaiian Islands. She would also like to re-visit her favorite areas of Alaska.

The department will hold a retirement reception for Dr. Stoffer later this year to thank her for her faithful service to the department, the university, the community and the profession.
Faculty News

Faculty Updates

Dr. Thomas Dence, Professor of Mathematics
Dr. Dence attended the Fall 2011 meeting of the Ohio Section of the Mathematics Association of America held at the University of Findlay. He delivered a contributed talk on “Did You Receive Your Invite to the Wedding of Bourbaki’s Daughter?”

In December, Dr. Dence attended the winter meeting of Intellectbase International held in Las Vegas. He is a currently a member of their editorial board, and at the meeting served as co-chair. He also gave a presentation “The Mathematician Who Never Existed.”

In April, Dr. Dence attended the spring meeting of the Ohio Section of the Mathematics Association of America at Xavier University in Cincinnati. He accompanied six AU students who participated in the statewide mathematics contest. He was also on the program as a member of the Centennial Committee and delivered a contributed talk on “Multiple Methods for Evaluating a Common Improper Integral.”

Dr. Boris Kerkez, Associate Professor of Computer Science
Dr. Kerkez was awarded a Senior Study Leave during the Spring 2012 semester. During the leave, Dr. Kerkez explored the relationship between mathematics and music, focusing specifically on ways that mathematical structures can be translated into audible information. As an outcome of this research, Dr. Kerkez created a software package that allows researchers to map irrational numbers, the Mandelbrot set fractal and algebraic groups to musical notes. He also presented a talk and published a paper at Bridges Conference - Mathematical Connections in Art, Music and Science at Towson University in Towson, Maryland, titled Extension of Neo-Riemannian PLR- group to Seventh Chords.

Dr. Christopher Swanson, Associate Professor of Mathematics
Dr. Swanson is in his sixth year as the director of Ashland University’s Honors Program. He and four Honors students (including actuarial science major Caitlin Music) presented a contributed paper entitled “Soliya’s Connect Program: Encouraging Dialogue between Honors Students and Students from Predominantly Muslim Universities” at the National Collegiate Honors Council conference held October 19-23, 2011 in Phoenix, Arizona.

At the Spring Meeting of the Ohio Section of the MAA at Xavier University, Dr. Swanson presented a contributed paper entitled “Maximizing the Sum of Three-Digit Numbers Consisting of the Digits 1 through 9”.

Dr. Swanson attended MathFest held August 1-4 in Madison, Wisconsin, leading an invited Project NExT workshop entitled “Experiencing Spherical Geometry: A Non-Axiomatic Approach to Teaching College Geometry” and serving as an invited panelist on a Project NExT panel entitled “Joining the Mathematical Community.”

Dr. Darren Wick, Professor of Mathematics
Dr. Wick presented the contributed paper “Linux Customized for Mathematics and Education” at the 24th annual International Conference on Technology in Collegiate Mathematics in Orlando, Florida in March 2012.
FACULTY NEWS

FACULTY UPDATES

Dr. Maduka Rupasinghe joined Ashland University as an assistant professor of mathematics in August 2012. He received his B.S. degree in business, finance and computational mathematics from University of Colombo, Sri Lanka. He went on to graduate school at the Missouri University of Science and Technology where he obtained his Ph.D. in mathematics with a statistics emphasis.

Dr. Rupasinghe research interests lie in the areas of statistics, especially Time Series analysis and statistical consulting. Applications of bootstrap techniques in Time Series are his major research focus. As statistics methodologies are applicable in many areas, he further offers a free statistical consulting service to the AU faculty and students.

His passion for mathematical problem solving immensely facilitated him in pursuing his post graduate degree in statistics with a GPA of 4.0/4.0.

Dr. Rupasinghe immigrated to the U.S.A. from Sri Lanka in 2007 to pursue his Ph.D. He has taught various mathematics and statistics classes from College Algebra to Applied Engineering Statistics and has won two teaching awards as a graduate teaching assistant at Missouri University of Science & Technology. He will be primarily teaching statistics classes, especially Elementary Statistics, Intermediate Statistics, Probability and Mathematical Statistics at AU. He also plans to design new statistics courses for AU students.

Dr. Rupasinghe is here in Ashland with his wife, Hiroshi Abhayawickrama and his daughter, Chenuli Rupasinghe. His family is excited about living in Ashland and this new adventure in their lives. He enjoys working with the friendly AU faculty, staff and students. He believes that the quiet environment in Ashland helps students have better concentration on their academics.

FACULTY PUBLICATIONS

Dr. Thomas Dence had two publications:

Dr. Boris Kerkez:
1. Extension of Neo-Riemannian PLR-group to Seventh Chords, Bridges Conference – Mathematical Connections in Art, Music, and Science, Towson University, Towson, MD, Spring 2012.

Your Support Appreciated

If you are interested in making a gift to support endowed scholarships, or department programs, please contact us at 419.289.5620. Your continuing support is important to the success of our program and our students!

Alumni Update

We would love to hear from you. Notes and news may be sent via e-mail to whall4@ashland.edu or mailed to Ashland University Dept. of Mathematics and Computer Science, 401 College Ave., Ashland, Ohio 44805.

Name ___________________________________________ (Maiden)__________________________
Major ___________________________________________ Year of Graduation ______________
Address ________________________________________________
E-mail Address _______________________________________ Occupation/Title __________________
What you are up to: _________________________________________________________________
________________________________________________________________________________