2002-2003 Outstanding Senior Awards

The Mathematics Department annually selects senior majors for recognition of their achievements. The criteria include both mathematics and overall GPA's, performance in capstone and other difficult mathematics courses, and results of the ETS Major Field Test in Mathematics.

This year the department has selected Nate Hanson and Sarah Pianka as winners of the "Outstanding Senior" awards. In addition to recognition by the faculty, Nate and Sarah will receive membership in the professional society of their choice.

NATE HANSON is the son of Steve and Mary Lou Hanson of Lakefield, Minnesota and is a graduate of Jackson County Central High School.

While pursuing a mathematics major with emphasis in secondary education, he was also a member of the MSUM varsity wrestling team for three years. During that time he was twice awarded All-conference honors and, impressively, was also honored as an Academic All-American.

Nate plans to teach mathematics and eventually work on a Master's Degree. Accordingly, he has opted for membership in the National Council of Teachers of Mathematics.

SARAH PIANKA graduated from Moorhead Senior High School and is the daughter of Pete and Maxine Pianka. You may recall Sarah's mother if you visited the President's office while attending MSUM Sarah has also completed a minor in computer science.

While at MSUM she has been very busy since, in addition to academic endeavor, she has maintained a heavy schedule of outside work as well.

Prior to attending MSUM Sarah was awarded a Chef Training Diploma from Northwest Tech in Moorhead. After graduation she plans to attend NDSU to do graduate work in applied economics. She has already learned that she will receive a research assistantship from NDSU.

Sarah has chosen membership in the Mathematical Association of America.
Wallen Scholarship Recipient

Jennifer Selstedt, a graduate of Richland High School (North Dakota), is the recipient of the James T. Wallen Scholarship for juniors in mathematics. Her parents are Randy and Cindy Selstedt of Colfax, ND.

At MSUM Jennifer has been a tutor for the mathematics department and has been a volunteer in the MSUM Women’s Center. She also has a minor in accounting.

After completion of her undergraduate degree with an actuarial emphasis, Jennifer plans to work in the actuarial field either for an insurance company or in pension planning.

The Wallen Scholarship is awarded by the Mathematics Department to a junior with an excellent record in mathematics. It is named in honor of Jim Wallen who taught in the department for many years prior to his untimely passing. Alumni may contribute to the Wallen Scholarship Fund by requesting that donations to the MSUM Foundation go directly to the Wallen Fund.

Department News

Starting last fall, Professor Don Mattson began a three-year phased retirement program. He will be working half time for three years before going on full retirement. The reduced load pleases him greatly! Mattson is happy to be an “ex-chair”, but appreciated very much the cooperation and professionalism that the Mathematics Department showed him during his time as chair. In need of a new chair, the department selected Professor James Hatzenbuhler. He has the unenviable task of representing the department in meetings with the administration, as well as handling the department’s operation on a semester by semester and day by day basis. (Yes, while the department secretary, Mrs. Sheryl Jones, and her student helpers do a lot of this work, there’s still too much left over for the chair).

There is currently much talk of the state’s budget crunch. At this stage the full effect of budget cuts is uncertain, but we are bracing for larger classes next year and fewer if any adjuncts to handle extra sections. The extra sections of courses required by the implementation of the mandatory placement exam and the Mathematics Learning Center add to this burden. For the most part, however, we expect to be teaching as usual. We have set up two funds with the MSUM Foundation for possible use by the mathematics program. The Mathematics Discretionary Fund and a Mathematics Endowed Fund. The first will provide money to help with student expenses at conferences, to purchase software and software licenses, to support mathematics outreach, and to purchase miscellaneous small equipment items for instruction. The second fund would be of a more permanent nature, with interest going to the Discretionary Fund. If you contribute to the MSUM Alumni Fund we’d ask you to consider designating at least part of your donation to one of these funds in the future.

Many of our majors, especially secondary education math majors, have been helping with our outreach work. Four students in Professor Peil’s geometry class, Nick Neibauer, Heather Lindberg, Louisa Maus and Chad Finch, assisted in a World of Change Workshop presentation on geometry. Making presentations at last fall’s MCTM conference were Nathan Hanson, Tony Hermes, Jessica Ebeen, Neibauer, Lindberg, Maus and Finch. Ann Johnson helped judge the local Science Olympiad, and Neibauer, Lindberg, and Finch lead activities at the Longfellow School Math Fair. Additionally this spring, Hermes, Lindberg, and Maus presented at the MCTM Conference in Duluth.

This spring the Math Club has also been more active, with mathematical presentations at several meetings. These included a presentation by John Reber on (the mathematics of) Powerball, a session on (good and bad) statistics by Professor Stockrahm, work with Geometer’s Sketchpad by Lindberg and Maus, dynamical systems by Professor Peil, counting and cardinal numbers by Professor Mattson and Zeno’s paradoxes by Katie Kapsner.
The Problem Corner 2003

1. For any positive integer \( n \), let \( S(n) \) denote the sum of its digits. Show the equation \( n + S(n) = 1,000,000 \) has no solution. Then solve the equation \( n + S(n) = 1,000,000,000 \). (This problem is not as difficult as it looks. \( n + S(n) = 586 \) has a solution since \( 572 + S(572) = 572 + (5 + 7 + 2) = 572 + 14 = 586 \).)

2. Let \( x \) and \( y \) be nonzero real numbers satisfying the equation \( x + \frac{6}{x} = 2y + \frac{3}{y} \). If \( x/\sqrt{y} \neq 2 \), find the product \( xy \).

3. Suppose you have a dozen identically appearing tennis balls numbered 1 through 12 and a balance scale. Eleven of the tennis balls have identical weights, but the other ball has a different weight. Show that it is possible after using the balance scale three times (can place any number of balls on each side on each trial) to locate the different weighing tennis ball AND to indicate whether it is heavier or lighter than each of the others.

To find solutions for these problems go to the MSUM website (www.mnstate.edu) and then go to the Mathematics Department’s webpage.

[Problems 1 and 2 appear in the University of Wisconsin Van Vleck notes 2003.]

2003 Alumnusnews:

Sharon (Renfrew) Johnson, ’66, retired in 2000 from Wheaton (MN) High School. She taught half time math and half counseling. The following fall Sharon started teaching ½ math and ½ counseling at Richmond 44 in Collfax (ND). She states that one of those years, she really WILL retire.

Dave Jacobson, ’80, resides in Rochester, MN and is nearing 20 years with IBM where he continues as an advisory reliability/quality engineer. He also serves on the faculty of St. Mary’s University where he teaches graduate-level statistics courses in the management program. Dave and wife Deb, who is a biostatistician with the Mayo Clinic, have two children, Justin (17) and Emily (14). He is actively involved in the youth basketball and soccer programs in the Rochester-area as a coach and volunteer.

Kathryn Renee (Carlson) Noel, ’86, resides in Harlem, MT and continues to teach 7th and 8th grade mathematics at Harlem Junior/Senior High School. She also teaches Driver’s Ed. Kathryn has one son, Trent (7), who is the joy of her life and keeps her on her toes. She states they ‘do everything together’. They live on a small farm in which Kathryn leases out cropland. Sharing the homestead is one dog, 17 cats and animals from her leasee (horse, cows, pigs). Kathryn and husband Tom are currently separated.

Mary (Johnson) Townsend, ’86, resides in Roseau, MN and has been working at Marvin Windows and Doors in Warroad, Minnesota. She is currently a communication specialist, edits the monthly newsletter for the company, and serves on various teams within the organization. Previously Mary taught mathematics and computer literacy in both public and private schools for over ten years. marytown@marvin.com

Ken Lindemann, ’89, is currently in his 13th year of teaching at O’Gorman High School in Sioux Falls, SD. He teaches AP Calculus, Pre-Calculus, and Advanced Geometry. Ken also coaches freshman football and varsity wrestling, in addition to working part time at Woodlake Athletic Club. He recently resigned his position as Recreational Services Fitness Coordinator at Augustana College. klindem66@siouxcitynet.net

Donna (Coyle) Rausch, ’89, resides in Tolstoy, SD and is in her 13th year teaching High School and Junior High math at Selby Area High School. She and her husband are currently pursuing adopting a child. drausch@selby.k12.sd.us

Jessi (Dahl) Mithun, ’90 and husband Doug celebrated their 10-year wedding anniversary last October. They have 3 wonderful children: Zach (12), Jake (9), and Joey (3). Jessi and Doug finally purchased their first house last summer in Moorhead. Jessi is (still) working at Community First Bankshares, Inc. (the holding company for Community First National Bank) in Fargo as the Portfolio System Analyst. She maintains the computer system that is utilized by the Treasury department for all the processes involved with investments. Jessie reports that due to their youngest son’s liver illness, they recently formed the Fargo/Moorhead community council of the American Liver Foundation in which they try to raise awareness within the community of liver health, functions, and diseases. They act as a support group for other people and families going through the same processes as they. They also will be doing fundraising for the benefit of the American Liver Foundation to continue its important research into the cause and cures for liver diseases. (If you’re in the area, join us for our 1st ever Liver Walk on May 3rd). AND, they had a display set up at the MSUM health fair this spring!! jessi.mithun@communityfirst.com

Flynn Dustrud, ’94, graduated in 2000 with a master’s degree in math from NDSU. He has been living in Madison, Wisconsin for the last three years teaching at several colleges in the area. On January 1, 2002 he married Shelly Lindberg (MSUM psychology ’95). Flynn, who is eight years away from turning 40, is still hoping to prove the Hodge Conjecture. souphus@charter.com

James Saari, ’95, is in his 5th year of teaching mathematics at Bemidji High School. He has also been attending Bemidji State University working toward his master’s degree in Mathematics Education. James has completed the course work and is currently composing his research paper. He and wife Julie (Disse) have three children, Keegan (3), Addie (2) and Aiden who was born on November 30th. James reports that outside of school he keeps busy working on their house and ice fishing during the winter.

Joella Ackerman, ’96, resides in Chicago, IL and is currently the Administrator for the Division of Endocrinology at Northwestern University’s Feinberg School of Medicine. This is Joella’s third position within the division since her arrival in January 2000 as a Financial Assistant. j-ackerman@northwestern.edu

Brandon Carlson, ’01, resides in Arcadia, CA and is currently the database administrator and head of technical support for the Vehicle Donation Processing Center in Monrovia California. bcarlson@hotmail.com

Kelly Finke, ’01, resides in Northfield, MN and teaches 7th grade math at Montgomery-Lonsdale High School in Montgomery, MN. She is engaged to be married August 9, 2003 and reports she is planning to make a home in the Montgomery area after her wedding.