

Mark your calendar . . .

Mathematics Colloquia Fall 2004

Mathematics colloquium talks are Wednesdays 3:40-4:40 p.m. in Science 108. Refreshments are provided.

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| Sept. 15 | Introduction to colloquium and math faculty. Also, Lois Olson, Center for Service, Work, & Learning |
| Sept. 29 | Colloquium #2 |
| Oct. 13 | Colloquium #3 |
| Oct. 27 | Colloquium #4 |
| Nov. 10 | Colloquium #5 |
| Dec. 1 | Colloquium #6 |
| Dec. 15 | Colloquium #7 |

Math Colloquia begin Wednesday September 15

The Augsburg Mathematics Colloquium Series brings speakers on campus approximately biweekly to share their experience using mathematics in applied or research settings. Junior and senior mathematics majors are expected to attend but all members of the Augsburg

community (including alumni!) are always welcome. Attendees should be aware that speakers typically assume some knowledge of calculus and the first two years of college mathematics.

Our 2004 fall season opens Wed. Sept. 15th with an introduction to the Mathematics Department and careers in mathematics. Come connect with other math majors and mathematics faculty, and learn more about services available through Augsburg's Center for Service, Work, and Learning to help you find an internship, volunteer position, or career.

Puzzle 1: Consecutive Sum

The number 42 can be written in three different ways as the sum of two or more consecutive positive (whole) numbers:

$$\begin{aligned}42 &= 13 + 14 + 15 \\ &= 9 + 10 + 11 + 12 \\ &= 3 + 4 + 5 + 6 + 7 + 8 + 9\end{aligned}$$

How many ways are there to do the same for the number 105?

Problem 1: Which are C.S.?

Which positive integers can be expressed as the sum of two or more consecutive positive integers? Justify your answer.

Send your solutions (not just answers, please) to the editors at

haines@augsborg.edu

or drop them in the "Puzzles & Problems" box in the Mathematics Department Suite, Science 137.

The fine print: No, we didn't write these puzzles ourselves but if we told you our sources, you'd know where to find a solution. So, we'll keep it secret for now and reveal our sources at the end of the year. Thanks to the real authors of these puzzles!

Augarithms is available on-line at augsborg.edu/math/augarithms/. Click on the date you want to see.

Augarithms

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Kaminsky in Spain, Boursaw joins dept.

Prof. Ken Kaminsky is on sabbatical for 2004-05 in sunny Spain, writing a new text for the MAT 373-374 Prob & Stats course.

Joining us this year is Prof. Blake Boursaw who is completing his Ph. D. in geometric group dynamics at the University of Minnesota. This fall, Blake will be teaching calculus and pre-calculus.



Blake and Blake's books

Math T-Shirts

If you ordered a t-shirt last spring, please pick it up from Prof. Matt Haines, Science 137F

Welcome Dupont as Math Chair

Prof. Rebekah Dupont returns from sabbatical and takes on her new role of chair of the Mathematics Department. She spent the past year working on her project: "The McKendrick Partial Differential Equation and Its Use in Analyzing Census Data Considering Migration," as a visitor at the Minnesota Population Center at the University of Minnesota.

Join Unbounded

Augsburg's Math Club, *Unbounded!* Look for posted notices about the first meeting the opening event. To be placed on the Unbounded mailing list, email Heather Greene, greeneh@augsborg.edu.

Volunteer to Tutor

There are opportunities to tutor K-12 students in mathematics as well as adult students seeking their GED. Interested? Contact Matt Haines, haines@augsborg.edu.

Oh, Yeah? I Dare Ya!

Mathematical challenges have been a part of the mathematical community for a long while. A prize announced in the year 2000 by the Clay Mathematics Institute of Cambridge, Massachusetts, was a \$7 million prize for 7 problems. The problems were posed by mathematician David Hilbert in 1900. Solutions to these problems have eluded mathematicians for over 100 years. Learn more at

<http://www.claymath.org/millennium/>

New Mathematics Classes for Elementary Education Majors

Seeking K-6 teaching certification with a concentration other than mathematics? If yes, you should take MAT 137/138 Mathematics for Elementary Teachers I & II. These are new courses that will satisfy your licensure requirements for mathematics content. These courses focus on mathematical knowledge needed to teach K-6 mathematics. The formation of the course is based on national recommendations, the Minnesota K-12 Mathematical Frameworks, and the Minnesota Board of Teaching standards. Tracy Bibelnicks and Matt Haines developed the courses with support from a Preparing Mathematicians to Education Teachers mini-grant. Only twenty-six grants were awarded in the nation. There was the only one funded in Minnesota.

Why have mathematics content courses dedicated to teachers? Isn't math, math? Perhaps it is easier to recognize that the knowledge needed to read is different than the knowledge needed to *teach* reading. Similarly, there is mathematical knowledge specific to teaching mathematics.

