

Augarithms



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April 4, 2005

Mark your calendar. . .

Mathematics Colloquia Spring 2005

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

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|---------------|---|
| Jan. 26 | Dr. Nicholas Coult, Augsburg College |
| Feb. 9 | Dr. Terrance Hurley, Dept. of Applied Economics, University of Minnesota |
| Feb. 23 | Dr. Brian Loe, Lockheed Martin Corporation |
| Mar. 9 | Profs. Tracy Bibelnicks, Blake Boursaw and Matthew Haines, Augsburg College |
| Apr. 6 | Dr. Matt Richey, St. Olaf College |
| Apr. 13 | Dr. Brenda Kroschel, Univiersity of St. Thomas |
| Apr. 27 | Dr. Danny Kaplan, Macalester College |

Great Expectations or What to expect when watching a baseball game

Matt Richey
Professor of Mathematics
St. Olaf College

It is often said that baseball is a game of situations – one on, no one out; base loaded, two outs. In each situation, there is an expected (average) number of runs scored. Knowing this not

only influences strategic decisions, such as "to bunt or not to bunt", but also affects overall fan happiness – how should you feel holding the other team to one run with the bases loaded, two outs? As well, by making an analogy to par in golf, we can use the expected runs scored to help assess batting proficiency. This talk is accessible to all audiences. Some knowledge of baseball is helpful, but not required.



Would you like some pi, professor?
Pi Day, 2005

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

Augarithms
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Baseball Arithmetic

Where does

$$1/2 + 2/3 = 3/5?$$

Why at home plate, of course.

If a batter gets 1 hit in 2 at-bats and then 2 hits in 3 at-bats, then his or her average is 3 hits in 5 at-bats.

Believe it or not, this alternative arithmetic system has computer graphics applications for pseudo-perspective.

And think how much easier learning fractions would be.

Source: <http://www.owlnet.rice.edu/~comp360/lectures/Baseball&Graphics.pdf>

Read More About Math & Baseball

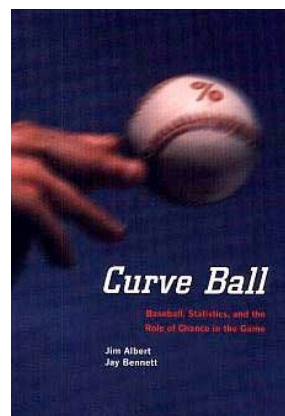
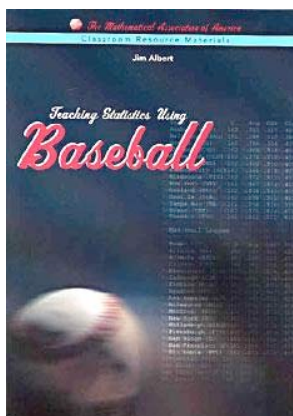
Curve Ball: Baseball, Statistics, and the Role of Chance in the Game by Jim Albert and Jay Bennett (Copernicus Books/Springer Verlag, 2001) treats a wide variety of topics, including:

- ✓ Comparing measures of batting ability;
- ✓ Hitting (and other) streaks;
- ✓ Measuring player's clutch performance;
- ✓ Deciding if the best team won the World Series.



Teaching Statistics Using Baseball by Jim Albert (Mathematical Association of America, 2003) uses baseball as a framework to introduce and explore statistical topics. Source: <http://www.maa.org/reviews>

For connections to research on baseball see the Society for American Baseball Research at <http://www.sabr.org/>.



Mathematics Classes by the Hour

Fall 2005 brings the following upper level courses to Augsburg.

Mon/Wed/Fri:

8:00 a.m.	MAT 245 <i>Calculus III</i>
9:10 a.m.	MAT 395 <i>Topics: Graph Theory</i> , Prof. Su Dorée
11:00 a.m.	MAT 271 <i>Discrete Math Structures</i> , Prof. Su Dorée
12:10 p.m.	Meet with classmates & profs in the Math Suite
1:20 p.m.	MAT 373 <i>Prob & Stats I</i> , Prof. Ken Kaminsky
2:30 p.m.	Meet with classmates & profs in the Math Suite
3:40 p.m.	MAT 491 <i>Mathematics Colloquium</i> (Wed)

Tuesdays:

6-9 p.m.	MAT 287 <i>Math History</i> , Prof. Matt Haines
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Math Wrestlers

Congratulations to senior mathematics major and three-time All-American Mark Matzek on earning his 2nd straight national wrestling title, finishing his final campaign at 34-0 and his career at 129-21. Mark continues a long tradition of wrestlers majoring in mathematics at Augsburg. He'll be student teaching in the fall.