

Brian Hollenbeck

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Education

- Ph.D. Mathematics 2001
University of Missouri-Columbia
- M.S. Applied Mathematics 1998
University of Missouri-Columbia
- B.S. Mathematics 1996
Magna Cum Laude, Departmental Honors
University of Missouri-Columbia

Teaching Experience

Associate Professor 2007-present
Mathematics, Computer Science, and Economics Department, Emporia State University

Assistant Professor 2001-2007
Mathematics, Computer Science, and Economics Department, Emporia State University

Courses taught:

MA110	College Algebra
MA125	Introduction to Mathematics
MA160	Functions of Calculus
MA161	Calculus I (including Honors Section)
MA225	Mathematics as a Decision Making Tool
MA240	Discrete Mathematics
MA262	Calculus II
MA263	Calculus III
MA291	Mathematical Modeling
MA307	Mathematics for Elementary/Middle School Teachers I
MA322	Linear Algebra
MA341	Introduction to Probability and Statistics (on-campus and via ITV)
MA380	Probability and Statistics
MA410	Junior/Senior Seminar
MA591	Mathematical Proofs
MA734	Complex Variables
MA735	Advanced Calculus I (on-campus and online)
MA736	Advanced Calculus II
MA791	Applied Analysis
MA791XA	Introduction to Combinatory Logic (online)
MA791A	Mathematical Modeling
MA847	Research Projects in Mathematics

Teaching Assistant/Graduate Instructor 1996-2001, University of Missouri-Columbia

Publications

- B. Hollenbeck, I. E. Verbitsky, *Best constant inequalities involving the analytic and co-analytic projection*, To appear in *Operator Theory: Advances and Applications*.
- B. Hollenbeck, N. J. Kalton, I. E. Verbitsky, *Best constants for some operators associated with the Fourier and Hilbert transforms*, *Studia Mathematica*, **157**, (3), (2003), 237-278.
- Brian Hollenbeck and Igor E. Verbitsky, *Best constants for the Riesz Projection* *J. Funct. Anal.*, **175**, (2000), 370-392.

Website postings

- Brian Hollenbeck, *How Advanced Calculus helped me become a better high school teacher*, PMET Volume posted on www.maa.org/PMET/papers.html, 2007.
- Brian Hollenbeck, *Predicting Pumpkin Weights*, Modeling Problem #20105 posted on MATHmodels.org, 2006.

Regional and National Presentations

- Who's #1? Can a simple ranking algorithm answer college football's toughest question?*
UMKC Expository Talk Series, Kansas City, MO, February, 2009.
- Using Maple to Help Students Create Mathematical Art*
KC Regional Math Technology Expo, Kansas City, MO, October 2008.
- When the "Best" Strategy Fails: Variance Trumps the Mean*
MAA Mathfest, San Jose, CA, August 2007.
- 4-Square Challenge*
MAA Mathfest, San Jose, CA, August 2007.
- A Project for Probability and Statistics Using Maple and Excel.*
KC Regional Math Technology Expo, Kansas City, MO, September 2006.
- Analyzing Farkel: A Probability & Statistics class project.*
MAA Mathfest, Knoxville, TN, August 2006.
- How Advanced Calculus helped me become a better high school teacher.*
PMET Conference, Oswego, NY, June 2006.
- i: An imaginary number living in the real world.*
Expository talk, UMKC, January 2006.
- The Norm of an Operator Involving the Analytic and Co-analytic Projection,*
Guest speaker, Analysis Seminar, University of Kansas, November 2005.
- Predicting Pumpkin Weights: An Activity for an Introductory Math Modeling Class,*
MAA MathFest, Providence, RI, August 2004.
- How do students think? Thought processes and problem solving,*
PMET workshop, Oswego, NY, June 2004.
- Wavelets: From Fourier to the FBI,*
Expository talk, Ottawa University, May 2003.
- Best constants for some operators associated with the Fourier and Hilbert transforms,*
Sixth New Mexico Analysis Seminar, Albuquerque, NM, March 2003.
- Best constants for some operators involving the Hilbert transform,*
Harmonic Analysis Conference, Columbia, Mo., May 2002.
- Best constants for operators involving the Hilbert transform,*
Prairie Analysis Seminar, Manhattan, Kan., October 2001.
- Best constants for some inequalities involving the Riesz projection,*
AMS Meeting, Birmingham, Ala., November 2000.

Supervised Undergraduate Research

When Was the Last Time YOU Were at the Zoo? By Christine Roether
Presented at PPRUMC, 2008.

An Algorithm for Evaluating Farkel Strategies by Jacob Magnusson,
Presented at KME Regional conference and PPRUMC, 2006.

Best Constants for Big-O Notation by Terrell Matthews, Nady Osmat, So-Mi Won,
Presented by Nady Osmat at PPRUMC and ESU, 2006.

Grants

Building Community through Colloquia,

FY2009 Academic Enhancement Grant, Emporia State University, \$750.

FY2008 Academic Enhancement Grant, Emporia State University, \$750.

FY2007 Academic Enhancement Grant, Emporia State University, \$750.

Building Community through Conferences,

FY2008 Academic Enhancement Grant, Emporia State University, \$2000.

FY2007 Academic Enhancement Grant, Emporia State University, \$2250.

Building Community through Colloquia and Conferences,

FY2006 Academic Enhancement Grant, Emporia State University, \$3000.

Awards, Fellowships, and Memberships

Member of Phi Kappa Phi (inducted in 2006)

Member of Mathematical Association of America (2001-present)

Member of Kappa Mu Epsilon (inducted in 2001)

Donald K. Anderson Graduate School Teaching Award, U. of Missouri-Columbia (2000)

G. Ellsworth Huggins Scholar, U. of Missouri-Columbia (1996-2000)

Member of American Mathematical Society (1996-2001)

Member of Phi Eta Sigma (inducted in 1993)

Other Professional Activities

Kansas City Regional Mathematics Technology EXPO planning committee (2009)

Commentator for one submission to MATHmodels.org (2007)

Presider for Kansas City Regional Mathematics Technology EXPO (2005-2008)

Reviewed two articles for Journal of Mathematical Analysis and Applications (2005, '06)

Refereed one article for Journal of Online Mathematics and its Applications (2004)

Departmental Seminars

Using Origami to Learn Mathematics, August 2007.

The Marvelous Spiral, February 2006.

i: An imaginary number living in the real world, September 2005.

Teaching future mathematics teachers: A report from PMET, April 2004.

University Service

Phi Kappa Phi Chapter Treasurer (2007-present)

Faculty Sponsor for Campus Crusade for Christ (2005-present)

Strategic Plan Implementation Committee (2009)

Faculty Senate (2006-2008)

American Democracy Project Steering Committee (2004-2008)

Institutional Researcher Search Committee (2004)

Parking Committee and Parking Appeals Committee (2002-2004)

Departmental Service

Faculty Sponsor for Kappa Mu Epsilon, mathematics honor society (2005-present)
Undergraduate Committee (Chair, 2004-present)
Advisor for Putnam Competition (2006, 2007)
Recruiting Committee (Chair, 2006; 2007, 2008, 2009)
Advisor for COMAP Math Modeling Contest team (2004, 2005, 2007)
Advisor for Kansas Collegiate Mathematics Competition team (2005-2008)
Faculty Recognition Committee (2007; Chair, 2008)
Seminar Committee (Chair, 2005-2008)
Honors Calculus Instructor (2001-2007)
Graduate Committee (2001-2004)

Conferences/Workshops

Annual Pikes Peak Regional Undergraduate Mathematics Conference, 2006-2009.
Annual KME Convention, 2002 - 2009.
Annual MAA Kansas Sectional Meeting, 2002 - 2009.
Annual KC Regional Math Technology Expo, 2005-2008.
MAA MathFest, San Jose, CA, August 2007.
Annual Prairie Analysis Seminar, 2001, 2002, 2004, 2006.
MAA MathFest, Knoxville, TN, August 2006.
PMET Conference – Oswego, NY, June 2006.
Workshop on Mentoring and Nurturing Students, Tuscon, Ariz., December, 2004.
MAA MathFest, Providence, RI, August 2004.
PMET Workshop –Oswego, NY, June 2004 and Potsdam, NY, June 2003.
Sixth New Mexico Analysis Seminar, Albuquerque, NM, March 2003.
Harmonic Analysis Conference, Columbia, Mo., May 2002.
Joint Mathematics Meeting, New Orleans, La., January 2001.
AMS Sectional Meeting, Birmingham, Ala., November 2000.