



Reading courses beyond the normal twelve-hour load:

Group Theory  
Algebraic Curves (graduate level)  
Mathematical Logic

Mentor, Honors Program Project:

Buddy Baker, "Blaise Pascal: Maker of the Modern Mind" 1986-1987

#### SERVICE TO THE UNIVERSITY:

Administrative:

Associate Dean, Arts and Sciences 2010-2011  
Chair, College of Arts and Sciences Dean Search Committee 2010  
Interim Director, CINSAM 2009-2011  
Co-director, with Steve Newman, Kentucky Early Mathematics Testing Program 2000-  
Acting Chair, Department of Mathematics and Computer Science 1999-2000  
Interim Associate Dean, College of Arts and Sciences 1997-1999  
Associate Dean, College of Arts and Sciences 1990-1992

Other:

Dean of College of Informatics Search Committee 2011-2012  
NKU Coordinator NSF Facilities Survey 2009-2012  
Chair NKU Celebration Committee 2008-2011  
NKU KY EPSCoR Representative 2008-2011  
NKU Representative, Posters at the Capitol 2008-  
NKU Advocates for Life 2007-  
NKU Newman Center Advisory Board 2006-  
Northern Right to Life, Faculty Advisor 2006-  
Arts and Sciences Dean Search Committee 2005-2006  
University Retention Committee 2003  
- Advisory Committee, NKU Freshman Book Project, Office of First Year Programs 2000-2001  
Co-Chair, NKU United Way campaign 2000-2001  
Co-Chair, NKU United Way Campaign 1999-2000  
Chair, CINSAM Director Search Committee 1999  
NKU Partnership Committee, Department of Mathematics and Computer Science 1997  
Chair, Assistant Dean Search Committee 1995  
Gathered curricular material for ABET accreditation for the Department of Technology 1995  
Faculty Senate Budget Committee, Member and Secretary 1993-1995  
Writing Across the Disciplines Committee 1993-  
Writing Assessment Group 1993-  
Embrace Opportunity Capital Campaign, Captain 1993  
NKU Scholarship Committee 1991-1992  
Trimester Committee 1991  
Arts and Sciences Theme Committee 1989-1990  
University Curriculum Committee 1988-1989  
Arts and Sciences Curriculum Committee 1988-1989  
Institutional Effectiveness Committee, SACS Self Study 1987-1988  
Advisor for athletes 1983-1985  
Library Automation Committee: Interlibrary Loan Subcommittee 1983-1985  
Grade Protest Committee (alternate) 1983-1984  
Chair, General Studies Subcommittee 1983-1984  
Department of Social Sciences Program Review Committee 1983  
General Studies and Remedial Work Subcommittee 1982-1984  
Pre-Medical and Pre-Dental Review Board 1982-  
Dean of Arts and Sciences' "Kitchen Cabinet" 1981  
Arts and Sciences Curriculum Subcommittee 1980-1984  
University Curriculum Committee 1980-1984

#### SERVICE TO THE MATHEMATICS & STATISTICS DEPARTMENT:

Musician, Contradance for Wilkinson Honors Class	2007
Chair, Professor Committee	
Chair, RPT Committee	2005-
Committee to design a Computer Information Systems Program	2003
Post tenure Review Committee (elected)	2003-
Course Coordinator (MAT 120, MAT 111, MAT 220 at different times)	2000-
Acting Chair	1999-2000
MAT 120 (Calculus) Review Committee	1996-1997
MAT 102 (Business Mathematics) Development Committee	1995
Departmental Hiring Committee	1995-1996
Chair, Departmental Curriculum committee	1994-1996
Acting Chair, July	1994
Chair, Department RP&T Committee	1989
Chair, Chairperson Search Committee	1986-1987
United Appeal departmental representative	1981-1982
Acting Chair, July-August	1981
Editor for departmental course review	1980
Advising about fifteen majors per semester	
Coordinator for several courses	
Numerous text selection committees	
Several reading courses beyond the normal load (see COURSES TAUGHT, above)	
Numerous editorial and proofreading tasks for the Chair	

#### OTHER PROFESSIONAL SERVICE:

Editor, <i>Proceedings</i> of Midwest History of Mathematics Conference	2006-
Midwest History of Mathematics Conference Organization committee	2000-
Local Arrangements, KYMAA meeting, NKU	2007
Midwest History Representative to Trisection Meeting Organizing committee	2003
Editor, <i>Proceedings</i> of 9th Midwest History of Mathematics Conference	2002
Outside Reviewer, University of Tennessee Martin Mathematics Department Program Review	2001
Editor, <i>Proceedings</i> of 8th Midwest History of Mathematics Conference	2001
Organized 8th Midwest History of Mathematics Conference	2000
Outside Reviewer, Shawnee State University Mathematics Department Program Review	2000
Preparing Future Faculty Members in CS Project, NKU representative	2000-
Outside Reviewer, Xavier University Mathematics Department Program Review	1999
KYMAA Nominating Committee	1998
KYMAA Nominating Committee	1993-1994

(see also: Offices in Professional Societies, below)

#### PROFESSIONAL ACTIVITIES:

##### Award:

Meritorious Service Award , MAA to be awarded January 2013

##### Refereed Journal Articles:

"Jan Hudde and the Quotient Rule before Newton and Leibniz." <i>The College Mathematics Journal</i> , Vol. 36, No. 4, September	2005
"The Solution of the Cubic Equation: Renaissance Genius and Strife" <i>Cubo Matemática Educacional</i> , Volumen 4 No. 2	2001
"Tartaglia Errs—Bombelli Gloats!: A Further Example of Collegiality among Renaissance	

- Algebraists”  
*Proceedings of the Midwest Conference on the History of Mathematics* 1999  
 “Obstructions to Deforming a Space Curve”  
*Transactions of the American Mathematical Society* 267(1) 1981:83-94 1981

Translations:

- Several letters from Descartes and Fermat appear in  
*Great Feuds in Mathematics*, by Hal Hellman, Wiley 2006

Refereed Presentation:

- “The Nuts and Bolts of Academic Careers: A Primer for Students and Beginning Faculty”  
 Panel member, SIGCSE Technical Symposium on Computer Science Education,  
 Charlotte NC 2001

Book chapters refereed and accepted

- Three chapters in the MAA Notes volume *Mathematical Time Capsules*:. 2011  
 “Complex Numbers, Cubic Equations, and Sixteenth-Century Italy”  
 “The Latitude of Forms, Area, and Velocity”  
 “Descartes’ Approach to Tangents”

Articles accepted by refereed journals:

- “Descartes’ Approach to Tangents”, *MAA Online Journal in the History of Mathematics* 2004

National Science Foundation Institute:

- Institute for the History of Mathematics and Its Use in Teaching  
 American University (two summers) 1995, 1996

Biographical Articles:

- “Bombelli,” “Cavalieri,” “Viète” entries in *Biographical Encyclopedia of Mathematicians*,  
 Salem Press/Marshall Cavendish 1998

Invited Presentations:

- “The Solution of the Cubic: Renaissance Brilliance and Brawling,” Centre College 2011  
 “A Preliminary History of the MHMC, the Varnished Truth”,  
 Midwest History of Mathematics Conference, Penn State University Erie, 2006  
 “Using the History of Mathematics in Teaching,” Boone County High School, 2006  
 “Scenes from the Pre-history of Calculus” The Frederick V. Pohle Colloquium on the History of  
 Mathematics, Adelphi University 2003  
 Panelist, Assessment Workshop, run by Bonnie Gold  
 KYMAA meeting, Georgetown College 2002  
 “Mathematical Combat: Who Solved the Cubic and Why Fight about It?”  
 University of Louisville 2000  
 “Rafael Bombelli of Bologna: *L’Algebra*, Solution of Equations and the Beginnings of the  
 Complex Numbers”  
 University of Louisville 2000  
 “The History of Mathematics” (with Dick Davitt)  
 KYMAA Minicourse, University of Louisville 1999  
 “Solving the Cubic Equation: A Story of Renaissance Genius and Renaissance Spleen”  
 KYMATYC Annual Meeting, Shakertown, KY 1998  
 “Renaissance Mathematicians at War: The Bitter Fight over the Solution of the Cubic  
 Equation”  
 Xavier University 1998  
 “Problems and Projects from the History of Mathematics in Regular Mathematics Courses”

AMS Regional Meeting, University of Louisville	1998
Grant Activities:	
Faculty Development Travel Grant (\$500)	2002
Local Principle Investigator, "Portable CAS Laboratories"	
National Science Foundation grant, \$9,000 granted to NKU	1995-1998
Offices in Professional Societies:	
Chair, HOMSIGMAA	2006-2009
Governor KY MAA	2005-2008
HOMSIGMAA Nominating Committee	2002
MAA Notes Editorial Board	1999-2006
Midwest History of Mathematics Conference Board	1998-
Midwest History of Mathematics Editorial Board	1998-
Chair, Kentucky section MAA	1989-1991
Chair-Elect, Kentucky section MAA	1987-1989
Reviews:	
Book reviews for Edwin Mellen Press:	
<i>A Biography of Maria Gaetana Agnesi, an Eighteenth-Century Woman Mathematician: With Translations of Some of Her Work from Italian into English</i> , by Antonella Cupillari	2007
<i>Spiritual Aspirations Connected with Mathematics: The Experience of American University Students</i> , by Klaus G. Witz,	2007
Selected Books Reviewed for MAA Notes Series:	
<i>Using Recent History of Mathematics in Teaching Mathematics</i> , Amy Shell-Gellasch and Richard Jardine, editors	2003
<i>Using History to Teach Mathematics: An International Perspective</i> , Victor Katz, editor	1998
<i>Changing Core Mathematics</i> , Chris Arney and Donald Small, editors	1998
Refereed three chapters for an MAA book on the history of mathematics	1997
Referee of articles for the <i>College Mathematics Journal</i>	1985-
Textbook reviews: West Publishers, PWS Publishers, Harper-Collins, others	1984-
"Never at Rest": <i>A Biography of Isaac Newton</i> , by Robert S. Westfall. Review in <i>MAA Kentucky Section Newsletter</i>	1984
Organization:	
Cofounder, with Danny Otero, Xavier University, of ORESME group, which meets twice a year to study original sources in the History of Mathematics	1997-
Talks:	
"Girolamo Cardano Argues That Minus Times Minus Is Minus, Not Plus" CSHPM	
"The History of KYMAA," KYMAA, Bellarmine University	2012
"The Kentucky Section," AMS-MAA Joint Meetings, Boston, MA	2012
"Cardano: 'A minus times a minus is minus' !?" MAA Mathfest, Lexington KY	2011
"Negative and Imaginary Numbers in 16th Century Italy," KYMAA Meeting	2011
"What numbers would Cardano use?" AMS Central Section Meeting, University of Iowa	2011
"Jan DeWitt (1625-72) and the beginnings of Coordinate Geometry.", KY MAA meeting	2005
Descartes' Criticism of Fermat's Approach to Tangent Lines, KY MAA meeting	2004

“Mathematics and Musical Scales” NKU MAT CSC Club	2003
“Johan Hudde's <i>Epistola secunda de maximis et minimis</i> : Maxima and minima, including an early version of the quotient rule, before Newton and Leibniz” AMS MAA Joint Meetings, San Diego	2002
“The First Appearance of the Quotient Rule: A Decade or More before Newton and Leibniz” KY MAA meeting	2001
“The Kentucky Early Mathematics Testing Program” (with Steve Newman) KY MAA meeting	2001
“Tartaglia Errs—Bombelli Gloats! A Further Example of Collegiality among Renaissance Algebraists” Midwest Conference on the History of Mathematics, Akron, OH	1997
“Teaching Calculus with the TI-92” (with Chris Christensen) KYMATYC meeting	1997
“Descartes’ Normals: Using History in the Classroom” Institute for the History of Mathematics and Its Use in Teaching, American University	1996
“Rafael Bombelli of Bologna: Renaissance Algebraist” KY MAA meeting	1996
“ <i>L’Algebra</i> by Rafael Bombelli. What Is in This Book from 1576?” (with Gary Stoudt and Ed Sandifer) Institute for the History of Mathematics and Its Use in Teaching, American University	1995
“Descartes’ Approach to Tangents: With Help from <i>Mathematica</i> ,” KY MAA meeting, Transylvania University	1995
“The History of Mathematics as a Source of Problems” Northern Kentucky Council of Teachers of Mathematics meeting (NKU)	1995
“Are Natural Languages Context-free?” KY MAA meeting, Centre College	1993
“Pascal’s Triangle” NKU Mathematics Student Congress	1992
“Topics in the History of Mathematics” NKU InService Day	1989
“Using the Computer Algebra Program <i>Maple</i> ,” NKU Faculty Seminar	1988
“Simple Points of Algebraic Varieties” NKU Faculty Seminar	1987
“The Development of the Laws of Fall” MAA Ohio Section Short Course on the History of the Calculus	1986
“Free Fall from Aristotle to Galileo” MAA Kentucky Section Meeting	1984
“Some Introductory Remarks on the Deformations of Algebraic Varieties” MAA Kentucky Section Meeting	1982
“Logic and Paradoxes” Departmental Freshman Seminar	1981
“Grassman’s Geometry” Departmental Faculty Seminar	1980
“Sets, Cardinality, Logic, Paradoxes” Three lectures for Departmental Freshman Seminar in Mathematical Folklore	1980

Sabbatical Leaves:

“Geometry Leading to the Calculus”	2012
“The History of Mathematics”	2001
“Commutative Algebra,” University of Kentucky	1988

Fellowships:

Northern Kentucky University Faculty Summer Fellowships:

“The Development of Early Algebra”	2003
“Projects from the History of Mathematics”	1994
“The History of Modern Algebraic Geometry”	1987
“Formal Power Series”	1983
“Deformation Theory”	1980

Seminars:

Probabilistic Artificial Intelligence	2005
Lie Groups	2003
Symplectic Geometry	1996-1997
Automata Theory	1986
Computer Algebra, "Factoring Algorithms for Polynomials"	1984
Mathematics-Physics, "Spacetime and Cosmology"	1983-1984
Algebra	1983-

In all of these seminars, except Computer Algebra, I took turns as lecturer.

Meetings Attended:

MAA/AMS Joint National Meetings:

Boston	2012
New Orleans	2011
San Francisco	2010
Washington	2009
San Diego	2008
New Orleans	2007
San Antonio	2006
Atlanta	2005
Phoenix	2004
Baltimore	2003
San Diego	2002
New Orleans	2001
Washington, DC	2000
San Antonio	1999
Cincinnati	1994
Louisville	1988
Cincinnati	1982
Biloxi	1979

MAA Summer Mathfest:

Lexington, KY	2011
Madison	2008
San Jose, CA	2007
Knoxville	2006
Albuquerque	2005

MAA Kentucky Section Meetings:

Bellarmino University	2012
UK	2010
WKU	2008
NKU	2007
Centre College	2006
Morehead State University	2005
Murray State University	2004
Bellarmino University	2003
Georgetown College	2002
University of Kentucky	2001
Eastern Kentucky University	2000

University of Louisville	1999
Morehead State University	1998
Murray State University	1996
Transylvania University	1995
Morehead State University	1994
Centre College	1993
Bellarmino College	1992
Northern Kentucky University	1991
Berea College	1990
Pennyrile State Park	1989
Georgetown College	1988
University of Louisville	1987
Eastern Kentucky University	1985
Centre College	1984
Bellarmino College	1983
University of Kentucky	1982
Jefferson Community College	1981
Western Kentucky University	1980
MAA Ohio Section Meetings:	
Shawnee State University	1997
Xavier University	1992
MAA Ohio Section Short Courses:	
"Calculus and Computer Algebra," Denison University	1988
"On the History of the Calculus," Ashland College	1986
"On the History of Mathematics," Kenyon College	1980
Ohio River Early Sources in Mathematical Exposition (ORESME) Reading Group	
January	2007
January and September	2006
January and October	2005
January and September	2004
September	2003
May and September	2002
January and September	2001
March	2000
January and September	1999
January and September	1998
Canadian Society for the History and Philosophy of Mathematics, Annual Meeting, University of Toronto, Toronto, Ontario	2002
Mathematics Unbound: The Evolution of an International Mathematical Community 1800-1945, University of Virginia	1999
Midwest Conference on the History of Mathematics, Akron, OH	1997
KYMATYC Shakertown Meeting	1997
Miami University Conference	1994
University of Kentucky Technology in the Teaching of Mathematics Conference	1993
Miami University Conference on the History of Mathematics	1992
MAA 75th Anniversary Meeting, Columbus, OH	1990
Canadian Society for the History and Philosophy of Mathematics, Annual Meeting, McMaster University, Hamilton, Ontario	1987
Association for General Studies and Liberal Education, National Meeting, Lexington, KY	1983
History of Mathematics Workshop, University of Toronto, Ontario	1983
Symposium on the History of Mathematics, Western Kentucky University	1980
NSF Regional Conference, "Special Divisors on Algebraic Curves," University of Georgia	1979
MAA Southeastern Section Meeting, the College of Charleston	1978



