

Curriculum Vitae

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Education

PhD	Mathematics	University of Colorado Boulder	1977
MA	Mathematics	University of Colorado Boulder	1974
BS	Mathematics	The Pennsylvania State University	1969

Professional Experience

UNC Wilmington		
Associate Professor		1983-present
Director of University Planning		2003-2010
Faculty Associate to the Chancellor		2002-2003
University of Kentucky		
Assistant Professor		1977-83

Courses Taught Courses taught at UNC Wilmington

MAT 101	College Mathematics for the General Student
MAT 111	College Algebra
MAT 112	Trigonometry
MAT 115	Precalculus
MAT 141	Basic Concepts of Mathematics I
MAT 142	Basic Concepts of Mathematics II
MAT 151	Basic Calculus with Applications I
MAT 152	Basic Calculus with Applications II
MAT 161	Calculus with Analytic Geometry I
MAT 162	Calculus with Analytic Geometry II
MAT 261	Multivariate Calculus
MAT 275	Axiomatic Systems
MAT 321	Number Theory and Its Applications
MAT 335	Linear Algebra and Matrices
MAT 336	Introductory Modern Algebra I
MAT 345	Modern College Geometry
MAT 361	Differential Equations
MAT 375	Combinatorics
MAT 421 (521)	Number Theory I
MAT 522	Number Theory II
MAT 531	Linear Algebra

	MAT 541	Modern Algebra I	
	MAT 542	Modern Algebra II	
	MAT 555	Modern Geometry	
	MAT 595	Research Seminar	
	CSC 233	Discrete Structures II	
Senior Project Direction	Fall 2012	Candace Craven	“The Sum of Divisors of an Integer”
	Spring 2012	Thomas Siddons	“The Pigeonhole Principle and an Introduction to Ramsey Theory”
		Emily Wood	“El Gamal vs RSA Cryptography”
	Fall 2011	Mario Paparozzi	“Random Number Generators”
	Spring 2011	Rob Knebel	“Growth Rates of Divide and Conquer Recurrences”
		Ryan Nichols	“Leonhard Euler: The Master of Us All”
	Spring 2003	Jessica Venlet	“Fundamentals of Ramsey Theory”
	Fall 2002	Aaron Thatcher	“Elliptic Curves and Cryptology”
	Spring 2000	Tom Koons	“The ElGamal Cryptosystem and Its Signature Scheme”
	Fall 1999	Tom Saraceni	“The Quadratic Sieve”
	Spring 1999	Phil Egan	“Diffie-Hellman Key Exchange”
		Shannon Meyer	“Introduction to Reed-Solomon Codes”
	Fall 1998	Ginger Hepler	“ElGamal Cryptosystems”
	Spring 1998	Jennifer Hardison	“Error-Correcting Codes”
		Janet Kiryluk	“Public Key Signature Schemes”
Spring 1997	Anna (Cham) Griffin	“Andrew Wiles and the Proof of Fermat’s Last Theorem”	
Fall 1996	Karen R. Smith	“Cryptography: The ElGamal Cryptosystem”	
Spring 1996	Melissa Lawrence	“Compact Discs and Reed-Solomon Codes”	
Fall 1987	R. Tucker Smith	“Algebraic Coding Theory”	
Honors Thesis Direction	2010-11	Amber Heaton	“Public Key Cryptography Authentication Protocols.”
Thesis Direction	<u>Master's Thesis Advisor</u>		
	1994-95	Kenneth Hufham	"Optimization of Arbitrary Gear Ratios Via Continued Fractions"
	1992-93	Katrina Daniels	"Pentagonal Tilings: The H-Pentagon"
	<u>Member of Master's Thesis Committees</u>		
	2005	Brent Young	“An Examination of Class Number for $Q(\sqrt{d})$ where \sqrt{d} has Continued Fraction Expansion of Period Three”
	2002	Keenan Jones	“Primitive Roots, the Cadogan Partition and the $3x + 1$ Problem”

1998	Eric Kliewer	“Coding and Decoding of a Gaussian Multiple Access Channel”
1996	J. Steven Felzer	"Rational Periodic Points for the Logistic Function"
1996	Michele Kocher	"Natural Neighbor Coordinates: Introduction and Some New Properties"
1993	Kristin Scott	"An Exposition on a Galois Theory for Commutative Rings"
1991	Ping Wang	"Geometric Programming: Method and Application in Coding Theory"

Graduate Committees

UNC Wilmington

Served on four master's comprehensive exam committees.

University of Kentucky

Served on nine PhD qualifying exam committees.

Served on one PhD comprehensive exam committee, and as "second reader" for one PhD thesis.

Advising

Advise 3-5 undergraduate mathematics majors each semester

Member, Graduate Advisors 1989-96

Departmental liaison advisor for Master of Arts in Teaching (Mathematics) students 1989-97

Faculty Advisor for Pi Mu Epsilon, the national mathematics honorary society 1984-93

Residence hall advising

“Selecting a Major” March 1999

“Personal Academic Success” January 1996

Awards

Distinguished Teaching Professorship 1994-97

Teaching Recognition

One of Office of Housing and Residence Life’s “Favorite Faculty”

April 1999

Phi Mu Fraternity’s Professor of the Month

February 1997

One of Schwartz Hall’s “Favorite Faculty”

December 1996

Named by one or more graduating seniors as the “one person at the university whose impact on them was significant” in the following semesters:

December 2011

December 2010

May 2009

December 2008

May 2007

December 2004

May 2004

May 2003

December 2002
May 2002
May 2001
May 2000
December 1999
May 1999
December 1998
May 1998
December 1997
December 1996
May 1996
December 1995
May 1990

***Professional
Interests***

Number theory and its applications; specifically, equations over finite fields, exponential sums, and applications to coding theory and primality testing

***Refereed
Publications***

1. *When is the Galois group of $X^n - a$ dihedral?*, The Mathematics Student **49** (1981 issue, published 1986), pp 178-183.
2. *Linearly recurring solution sequences for equations over finite fields*, Journal of Number Theory **19**(1984), pp 209-218.
3. *On the number and distribution of simultaneous solutions to diagonal congruences*, Canadian Journal of Mathematics **33**(1981), pp 421-436.
4. *Simultaneous solutions to diagonal equations over finite fields*, Journal of Number Theory **11**(1979), pp 100-115.

***Current
Research***

1. (under revision, with D. R. Stone of Georgia Southern University)
Paths of visible lattice points.
2. *Prime pairs of mutually odd order.*
3. *Power sums in finite fields.*
4. *Simultaneous variation of numbers of solutions to congruences in number of variables and modulus size.*

***Selected
Presentations***

1. "The New Role of Accreditation Liaison," invited professional development co-presenter, 2004 Annual Meeting of the SACS Commission on Colleges, Atlanta, GA, December 2004.
2. "An Introductory Undergraduate Course in Number Theory Motivated by Applications and Implemented with MAPLE," presented in the session "The Use of Technology in the Teaching of Applications in Undergraduate Mathematics" at Mathfest '99, the annual summer meeting of the Mathematical Association of America in Providence, R.I., August 1, 1999.
3. "Visible Lattice Points," presented at the South East Regional Meeting on Numbers, Athens, GA, April 1997

External

1. Attended the workshop, "Assessment and Evaluation of Administrative and

Workshops

- Academic Support Services,” Atlanta, GA, December 2009
2. Attended the workshop, “QEP Assessment That Works,” San Antonio, TX, December 2008
 3. Attended the workshop, “Use a Readiness Audit to Prepare for Compliance Certification,” San Antonio, TX, December 2008
 4. Attended the workshop, “Preparing for Compliance Certification,” New Orleans, LA, December 2007
 5. Attended the workshop, “Renewed Commitment to Learning: Integrating Learning Outcomes,” New Orleans, LA, December 2007
 6. Attended the workshop, “Building a Learning-Centered Process,” New Orleans, LA, December 2007
 7. Attended the Regional NSSE Users’ Workshop, Orlando, FL, February 2005
 8. Attended the workshop, “Developing Planning Models for Institutional Effectiveness,” Denver, CO, September 2004
 9. Attended the workshop, “A Beginner’s Workshop for Self-Study Directors,” (and other presentations) at the annual meeting of the Southern Association of Colleges and Schools, Atlanta, GA, December 1999
 10. Attended the workshop, “Cultivating Good Process for Peer Review of Teaching,” (and other presentations) at the Seventh AAHE Conference on Faculty Roles and Rewards, San Diego, CA, January 1999
 11. Attended the workshop, “Preparing Promotion and Tenure Committees for Changing Realities,” (and other presentations) at the Fifth AAHE Conference on Faculty Roles and Rewards, San Diego, CA, January 1997
 12. Attended ATLAST Workshop, “Augmenting the Teaching of Linear Algebra with Software Tools” at the College of William and Mary, August 1995
 13. Attended the workshop, “The Unreasonable Effectiveness of Number Theory,” Orono, ME, August 1991

Professional Memberships

American Mathematical Society	1974-present
Mathematical Association of America	1978-present
Association of American Colleges and Universities	2003-2010
Society for College and University Planning	2003-2010

Selected Service

<u>University Service</u>		
Campus-Initiated Tuition Committee	2003-2010	
SACS Accreditation Liaison Committee on Application Services	2002-2010	
Information Technology Coordination Council	2002-2008	
Search Committee for Institutional Research		
Director	2004	Chair
Master Plan Advisory Committee	2004-05	
Diversity Initiative Planning Committee	2004-05	
Hearings Panel	2003-04	
Strategic Integrated Marketing Committee	2002-03	
Director, UNCW SACS Self-Study	1999-2002	Director

Committee on Reappointment, Promotion and Tenure	1994-2000	Chair 1996-97
Senate Evaluation Committee	1992-95	Chair 1993-95
	also 1998-04	
Ad Hoc Faculty Senate RPT Select Committee	2000-04	
Ad Hoc Committee on Post-Tenure Review	1997-98	
	also 2001	
Faculty Senator	1991-98	
Faculty Senate Steering Committee	1992-98	
Faculty Senate Vice-President	1992-95	Vice-President
Ad Hoc Senate Committee to Recommend Procedural Guidelines for Evaluations	1997-98	Chair
Chancellor's Faculty Advisory Committee	1995-97	
Ad Hoc Senate Committee on Promotion and Tenure of Department Chairs	1996	Chair
Academic Affairs Ad Hoc Advisory Committee on Total Quality	1993-94	
SACS Self-Study Section Chair (Institutional Effectiveness)	1990-92	Chair
University Curriculum Committee	1987-91	Chair 1988-91

Selected Departmental Service

Mathematics Interest Group	1983-present	
Departmental Personnel Committee	1987-90	Chair 1988-89
	also 1999-2000	Chair 1999-2000
Calculus Coordinator	1987-2000	
Departmental Executive Committee	1996-98	
Departmental Steering Committee	2010-11	
Departmental Infrastructure Committee	2010-11	Chair
Departmental Policy Committee	2011-12	
Departmental Post-Tenure Review Cmte.	2010-12	
Departmental Peer Observation Committee	1994-98	
	also 2002-05	Chair 2002-05
	also 2010-13	Chair 2011-12
Departmental Peer Evaluation of Teaching	2012-13	Chair
Mathematics Graduate Coordinator	1989-94	
Departmental Curriculum Committee Chair	1984-85	Chair
	also 1992-93	Chair

Service to Public Schools

Gave four talks at Hoggard High School (two on Feb. 16, 1996, and two Nov. 15, 1996) as part of their "Careers on Line" program to inform high school seniors of career opportunities in mathematics and to give them a tantalizing sample of what college mathematics is like.

Presented the Chimiak Mathematics Award for top achievement by a senior in mathematics at the Hoggard High School Awards Ceremony, May 1996

Science Fair judge 1985-89
Presented numerous talks to middle school and secondary school mathematics
teachers through the Mathematics and Science Education Center
1984-88

Other Service

Number theory referee for the American
Mathematical Monthly 1982-present
Treasurer, Cape Fear Orchid Society 1997-2006
Youth, high school, and college soccer referee 1983-88
USSF soccer referee instructor 1987-88
Textbook manuscripts reviewed for
Prindle, Weber & Schmidt and for
Houghton-Mifflin

September 2012