

Katrina Palmer

Mathematical Sciences Professor at Appalachian State University
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Education

Emory University

Ph.D. Mathematics

Atlanta, GA

1999 - 2004

Appalachian State University

M.A. Mathematics

Boone, NC

1996 - 1999

Roanoke College

B.S. Mathematics

Salem, VA

1991 - 1995

Teaching Experience

Professor

07/15 - present

Associate Professor

07/10 - 06/15

Assistant Professor

08/04 - 06/10

Associate Graduate Faculty

10/04 - present

Appalachian State University, Boone NC

- Courses taught: Graduate Linear Algebra for Teachers, Graduate Linear Algebra, Numerical Linear Algebra, Computational Math for Teachers, Graduate Pedagogy Seminar, Actuarial Senior Seminar, Numerical Methods, Graph Theory, Junior Honors, Financial Mathematics, Differential Equations, Linear Algebra, Calculus II, Calculus I, Pre-Calculus, College Algebra, Introduction to Mathematics, Honor First Year Seminar (Sustainability & Math) and Freshman Seminar (Forensic Chemistry Learning Community)

Online Math Instructor

04/14 - present

Southern New Hampshire University, Manchester NH

- Facilitate Discrete Math Classes

Summer Ventures Instructor

08/99, 08/00

Appalachian State University, Boone NC

08/07, 08/08

- Taught Applied Mathematics to advanced high school students

Math Camp Instructor

06/06, 07/99

Appalachian State University, Boone NC

- Taught Word Problems Strategies and Exponential Reasoning to 60 middle and high-school campers

Teaching Associate and Doctoral Fellow

08/00 - 05/04

Emory University, Atlanta GA

- Taught five sections of Business Calculus in reform style
- Taught two semesters of Games and Graphs

Freshman Seminar Instructor

01/03 - 02/03

Emory University, Atlanta GA

- Co-designed and team-taught a three week module on Image Processing.

Instructor for TATTO Teacher Training Program Emory University, Atlanta GA • Led “Why didn’t someone tell me?” sessions to 2nd year graduate students	08/02, 08/03
Instructor Hawai’i Pacific University, Honolulu HI • Taught Elementary Statistics to a group of diverse students	05/02 - 06/02
Instructor Spelman College, Atlanta GA • Taught Linear Algebra to advanced post-freshmen students	06/01 - 07/01
Instructor Appalachian State University, Boone NC • Taught a lab-based Introduction to Mathematics class	07/00 - 08/00 07/99 - 08/99
Instructor Art Institute of Atlanta, Atlanta GA • Taught three sections of College Algebra	01/00 - 06/00
Teaching Associate Appalachian State University, Boone NC • Taught a total of six sections of College Algebra with Applications to freshmen	08/98 - 05/99 08/96 - 05/97
Eighth Grade Teacher Brevard Middle School, Brevard NC • Taught Pre-Algebra and Introduction to Algebra	08/97 - 06/98
High School Math Teacher Northern Vance High School, Henderson NC • Taught Algebra II and Algebra IB	08/95 - 06/96

Appalachian Administrative Service

Mathematical Sciences Transfer Director • Organize STEM Transfer Day for Community College Students • Transfer Faculty Mentor • Organize welcoming events for new Transfer Students	09/17 - present
Learning Technology Advisory Committee • Provide feedback on AsULearn tools • Co-facilitate Online Course Redesign Institute	09/17 - present
Placement Committee Chair • Analyze student success under current placement exams	09/17 - present
SOAR Co-director • Recruit, organize and implement SOAR summer bridge program for incoming STEM students	05/17 - present
Actuarial Program Assessment Committee • Develop goals and assessment methods for actuarial science degree	08/15 - present

Transfer Services Team	01/15 - present
<ul style="list-style-type: none"> • Transfer Symposium Planning Subcommittee (Spring 2016) • Bridge Program Subcommittee (2015-2016) • Early College Subcommittee (2016-2017) • Transfer Housing Subcommittee Chair (2017-2018) 	
ACCESS/SSS Panel	2017, 2018
<ul style="list-style-type: none"> • One of four on faculty panel for ACCESS and SSS students 	
Business Calculus Redesign Committee	08/15 - 05/16
<ul style="list-style-type: none"> • Creating new course for College of Business 	
NCCTM Math Contest Planning Committee	08/15 - 08/18
<ul style="list-style-type: none"> • Helping plan Western region math contest 	
Mathematics Program Director for the Appalachian Undergraduate Academy of Science	08/08 - 05/14
<ul style="list-style-type: none"> • In charge of the Mathematics research clusters and recruitment for the Appalachian Undergraduate Academy of Science (NSF STEP grant) • Helped run the 5-week Summer Bridge Program 	
Director of Mathematics (College Teaching) Graduate Program	07/09 - 06/13
<ul style="list-style-type: none"> • Advise & Recruit Graduate students • Organize a weekly pedagogy seminar • Schedule elective courses and assign graduate assistantships 	
Graduate Council	08/11 - 01/14
<ul style="list-style-type: none"> • Awards and curriculum subcommittees 	
General Education Quantitative Literacy Reviewer	05/11 - 05/13
<ul style="list-style-type: none"> • Follow the QL rubric to evaluate artifacts 	
Graduate Program Assessment Committee	10/09 - 07/13
<ul style="list-style-type: none"> • Developed assessment methods for the Masters in Math Ed program 	09/14 - 07/15
Graduate Revisioning Committee	09/09 - 07/10
<ul style="list-style-type: none"> • Helped change the graduate program to meet new state standards 	
Actuarial/Statistics Program Assessment Committee	01/09 - 01/10
<ul style="list-style-type: none"> • Developed assessment methods for both the actuarial science and statistics degrees 	09/13 - 05/14
1110 Book Committee	11/09 - 02/10
<ul style="list-style-type: none"> • Helped pick a new book for Calculus I - Calculus III 	
Director of Actuarial Science Program	09/08 - 09/09
<ul style="list-style-type: none"> • Advised all actuarial science majors • Coordinated speakers, shadow days, and internships • Created webpages for actuarial sciences • Smoothed kinks out of the new degree program • Recruited at local high schools 	
Math Lab Coordinator	09/05 - 09/09
<ul style="list-style-type: none"> • Coordinated with the Learning Assistance Program to keep the Math Lab in operation 	
Actuarial Senior Seminar General Education Committee	08/08 - 01/09
<ul style="list-style-type: none"> • Created documents for getting MAT 4330 approved as a senior capstone 	

1010 General Education Committee	08/08 - 11/08
• Helped with documentation for getting 1010 approved for quantitative literacy	
Department Personnel Committee	
• Served as a voting member on the DPC	07/07 - 07/09
• Served as an alternate member on the DPC	07/06 - 07/07
Actuarial/Statistics Program Assessment Mission Committee	08/07 - 11/07
• Developed goals and objectives for both the actuarial science and statistics degrees	
Scholarly Activity Committee	01/06 - 03/06
• Developed guidelines for scholarly activity for release time	
Advisor for Math Majors	11/06 - 05/11
• Helped guide math majors	09/14 - present
Computational Math/ Numerical Methods Committee	01/06 - 05/06
• Served on committee to modify courses for the Computational Math track	
Department Representative on Family Days	Spring '06, '09
• Spoke with prospective majors and their parents	Fall '06, '07, '08
Faculty Mentor for Mathematics Graduate Students	09/05 - 12/07
• Work with students to help develop their teaching style	09/08 - present
Mentor for 1010 Faculty	09/05 - 05/06
• Worked with new 1010 faculty to help them with their 1010 class	
Actuarial Science Committee	09/05 - 12/06
• Served on committee to propose a new Actuarial Science major	
Freshmen Orientation Summer Reading Discussion Leader	
• <i>Iron and Silk</i>	08/21/05
• <i>A Home on the Field</i>	08/19/07
• <i>The Glass Castle</i>	08/24/08
Facilitator for Faculty/Student Exchange Session	2005, 2009
• Met with incoming freshmen to address their concerns	2010, 2011
Math 1010 Committee	10/04 - 5/05
• Modified ASU's Introduction to Math Class	

Professional Service

Cove Creek Math Fair	2019
• Helped teachers create their first math fair	
NCCTM High School Math Competition	2017, 2018
• Volunteered by proctoring & grading	2019
Judge Moody's Mega Competition	2013, 2014
• Judged high school modeling papers	2015, 2016, 2017
COMAP Modeling Judge	2006, 2012
• Graded COMAP competition problems	2013
Western Region Science Fair Judge	2013, 2014, 2016
• Judged middle school science fair projects	

Presentations at area schools

- Draughn High School (Burke County): Coordinated activities to understand actuarial science 11/09, 02/11
- Cranberry Middle School (Avery County): Coordinated hands on activities to introduce matrix applications 04/09, 04/10
- Alexander High School (Alexander County): Introduction to Actuarial Science 04/08, 11/07

Consultant for Westat on an MSTP Project

- University of California at Irvine for the year 5 site visit. 02/08
- Hofsta and SUNY Stony Brook for the year 2 site visit. 07/05

Student Teacher Advisor for Secondary Education Majors

- Observe and provide feedback for student teachers 2006, 2007
2010

Journal Referee

- *College Math Journal* 2015
- *Journal of Applied Mathematics* 2011
- *Pattern Recognition* 2011
- *Mathematics Magazine* 2007
- *International Journal of Applied Mathematics and Statistics* 2006

Western Region Math Fair Judge

- Judged middle school math fair projects 1998, 2006
2007

Daytoc Differential Equations Course

- Developed an on-line Differential equations course 10/06 - 5/08

Presentations at NCCTM conferences

- Teaching Trig Through Passive Solar Design 10/15
- It's Electrifying, but is it Affordable? 10/11
- Criminal Investigation through Mathematical Examination 10/10
- Actuarial Activities 10/09
- Matrix Motivation 10/07
- Matrix Lessons & Applications 10/06
- Finding Galaxy Distances 10/05
- Taking Math Beyond the Classroom: Some High School Math Fair Ideas

Publications

- [25] "A Complex Number Raised to a Complex Exponent: What Does This Mean?," accepted by *PRIMUS*, 2019. (with Mike Bosse and Bill Bauldry)
- [24] "Revealing the Mathematics of Sustainability," *MAA Notes Volume*, 2018. (with Eric Marland, Alana Baird, Sharareh Nikbakht)
- [23] "Revising General Education Math Courses with Client Disciplines," *PRIMUS*, 2018 (with Holly Hirst)
- [22] "Hydrology," Module for Students in Classes 9-12, Published by Mathematical and Computational Methods for Planning a Sustainable Future (PS-Future), 2016. (with LeaAnn Pitcher)
- [21] "Using Padlets and Online Journals to Enhance Student Learning" *The Proceedings of the Twenty-fourth annual International Conference on Technology in Collegiate Mathematics*, May 2016
- [20] "Calculus I Course Design," Accepted by Dee Fink for online publication (2015). (<http://www.designlearning.org/examples-of-design/examples/>)

- [19] "A Geometric View Connecting Determinants to Area," *Consortium*, Spring/Summer 2015.
- [18] "An Iterative Algorithm for Large-scale Tikhonov Regularization," *Siam Journal Scientific Computing*, Copper Mountain Special Edition, 2015 (with J. Chung)
- [17] "Flipping the Calculus Classroom," *PRIMUS*, 2015.
- [16] "Passive Solar," Module for Students in Classes 9-12, Published by Mathematical and Computational Methods for Planning a Sustainable Future (PS-Future), 2014. (with David Black)
- [15] "BioMath Module: Tomography," *The UMAP Journal*, Spring 2013. (with Midge Cozzens)
- [14] "Tomography: A Geometric and Computational Approach" Module for Students in Classes 9-12, Published by The Value of Computational Thinking across Grade Levels (VCTAL), 2012. (with Midge Cozzens)
- [13] "Using SmartPens to Communicate Mathematics Online" *The Proceedings of the Twentieth annual International Conference on Technology in Collegiate Mathematics*, May 2012
- [12] "Tomography: Where Mathematics, Biology and Technology Come Together To Solve Problems in Many Areas" Module for High School Students, Published by DIMACS through Integrating Mathematics and Biology (IMB), 2011. (with Midge Cozzens)
- [11] "Food Safety, Structural Integrity, and Medical Imaging: What do they have in common?" Module for Students in Classes 11-14, Published by the Command, Control and Interoperability Center for Advanced Data Analysis (CCICADA), A Department of Homeland Security Center of Excellence (with Midge Cozzens)
- [10] Differential Equations, an online course written with Dr. Rene Salinas of Appalachian State University, accepted for online publication by LEARN NC of the University of North Carolina at Chapel Hill School of Education, May 2008.
- [9] "Creating Basic Animations in MATLAB," *The Proceedings of the Twentieth annual International Conference on Technology in Collegiate Mathematics*, 2008
- [8] "Biological Applications in the Mathematics Curriculum," *PRIMUS*, January, 2008 (with Eric Marland and Rene Salinas)
- [7] "Preparing Future Faculty: An Interdisciplinary, Undergraduate Science Course Taught by Graduate and Postdoctoral Teacher-Scholars," in *Journal of College Science Teaching*, January/February 2007 p. 24 - 30 (with Jessica McDermott Sales, Dawn Comeau, Kathy Liddle, Lisa Perrone and David Lynn)
- [6] "Bridging the Gap: A Research Based Approach for Teaching Interdisciplinary Science to Freshmen," in *Journal of College Science Teaching*, Vol. XXXV, Number 6, May/June 2006 p. 36-41 (with Jessica McDermott Sales, Dawn Comeau, Kathy Liddle, Lisa Perrone and David Lynn)
- [5] "Discovering the Mathematics of Image Deblurring," *The Proceedings of the Eighteenth annual International Conference on Technology in Collegiate Mathematics*, 2006
- [4] "Quasi-Newton Methods for Image Restoration," in *Advanced Signal Processing Algorithms, Architectures, and Implementations XIV*, edited by Franklin T. Luk, Proceeding of SPIE Vol. 5559 (SPIE, Bellingham, WA, 2004) pp. 412 - 422 (with J. Nagy)
- [3] "Steepest Descent, CG, and Iterative Regularization of Ill-Posed Problems," *BIT*, V. 43, pp. 1003 - 1017, 2004 (with J. Nagy)

[2] “Iterative Methods for Image Deblurring: A Matlab Object Oriented Approach,” *Num. Algor.*, V. 36, pp. 73 - 93, 2004 (with J. Nagy and L. Perrone)

[1] *Basic Mathematics Study Guide*, Professional Career Development Institute, 2004

Presentations

“Graphing Your Finger Print” Invited Speaker, Roanoke College, Salem, VA	10/08/19
“Graph Theory & Finger Prints” S-STEM Seminar, Appalachian State University, Boone, NC	09/27/19
“What is Math Anyway?” S-STEM Seminar, Appalachian State University, Boone, NC	03/01/19
“Transfer Symposium: Curriculum Alignment for Transfer Student Success” NISTS, Atlanta, GA	02/13/19
“Applications of Inverse Problems” Invited Speaker, AB Technical Community College, Asheville, NC	10/19/18
“Complex Exponentiation” Student Investigation, AB Technical Community College, Asheville, NC	10/19/18
“Alignment at Appalachian State” Math Pathways, Chapel Hill, NC	09/07/18
“Co-requisite Course for Calculus in Gateway Courses” Math Pathways, Chapel Hill, NC	09/07/18
“Span” NCMATYC Annual Conference, Durham Tech Community College, Durham	03/10/17
“Sustainability in QL” NCMATYC Annual Conference, Durham Tech Community College, Durham	03/09/17
“How Mathematics Faculty at Appalachian State Support Transfer Students” NISTS, Atlanta, GA	02/17/17
“Padlets and Journals in Calculus” ICTCM, Atlanta, GA	03/12/16
“Mathematics of Planet Earth: Passive Solar Design” NCMATYC Annual Conference, Southwestern Community College, Silva	03/10/16
“Teaching Trig Through Passive Solar Design” NCCTM Conference, Greensboro, NC	11/04/15
“Geometric View of Determinants” NCMATYC Annual Conference, Pitt Community College, Winterville	03/13/15
“Reasons to Flip Calculus” SOCAMATYC Annual Conference, Charleston, SC	04/17/15

<p>“Flipping the Calculus Classroom” JMM, Baltimore MD</p>	01/17/14
<p>“Flipping the Calculus Classroom” NCMATYC Annual Conference, Haywood Community College, Clyde</p>	03/14/13
<p>“It’s Electrifying, but is it affordable?” NCCTM Conference, Greensboro, NC</p>	10/25/12
<p>“Using SmartPens to Facilitate Math Communication Online” ICTCM, Orlando, FL</p>	03/24/12
<p>“Using SmartPens to Facilitate Math Communication Online” JMM, Boston, MA</p>	01/07/12
<p>“Using SmartPens to Communicate Math Online” Invited Speaker, MAA Florida Local Conference, West Florida State, Pensacola, FL</p>	11/19/11
<p>“Criminal Investigation through Mathematical Examination Workshop” NCCTM Conference, Greensboro, NC</p>	10/27/11
<p>“Two Applications of Linear Algebra: Population Models and Image Blurring” NCMATYC Annual Conference, DCCC, Thomasville</p>	03/11/11
<p>“ASU Mathematical Sciences: Diverse Mathematics Program Options” NCMATYC Annual Conference, DCCC, Thomasville</p>	03/11/11
<p>“Actuarial Activities” NCCTM Conference, Greensboro, NC</p>	10/30/10
<p>“Triangles in Architecture” Invited Speaker, Appalachian State University, Boone, NC</p>	01/19/10
<p>“Medical Imaging with Connections to Math” Invited Speaker, Lenoir-Rhyne University, Hickory, NC</p>	11/20/09
<p>“Two Applications of Inverse Problems: Reflection Seismology & Image Restoration” Invited Speaker, Lenoir-Rhyne University, Hickory, NC</p>	11/19/09
<p>“Optimization at an Introductory Level” Invited Speaker, Appalachian State University, Boone, NC</p>	11/18/09
<p>“Matrix Motivation” NCCTM Conference, Greensboro, NC</p>	10/29/09
<p>“Online Differential Equations: The Challenges & Changes” Joint Mathematics Meeting, Washington DC</p>	01/07/09
<p>“Teaching Differential Equations On-Line” Graduate Student Seminar, Appalachian State University</p>	09/22/08

<p>“Introduction to Matrices and their Uses” Invited Speaker, Rural Schools Professional Development, Ashe County High School, NC</p>	07/15/08
<p>“Creating Basic Animations in Matlab” 20th Annual ICTCM Conference, San Antonio, TX</p>	03/07/08
<p>“Linear Programming” Invited Speaker, Maiden Middle School Math Day, Appalachian State University</p>	02/22/08
<p>“Research in Math? I thought math had already been discovered.” Invited speaker, Appalachian State University</p>	11/05/07
<p>“Why is the state bombarding the curriculum with so many matrices?” NCCTM Conference, Greensboro</p>	10/11/07
<p>“Biological Applications Across the Mathematics Curriculum” Joint Math Meeting, New Orleans</p>	01/07/07
<p>“Mathematics of Medical Imaging” Women in Math Day, Appalachian State University</p>	10/05, 10/06, 09/07
<p>“Finding Galaxy Distances and Velocities” NCCTM Conference, Greensboro</p>	10/05/06
<p>“Discovering the Mathematics of Image Deblurring” 18th Annual ICTCM Conference, Orlando, FL</p>	3/17/06
<p>“Mathematics of Medical Imaging” Invited Talk for CSEMS, Appalachian State University</p>	11/02/05
<p>“Taking Math Beyond the Classroom: Some High School Math Fair Ideas” NCCTM Conference, Greensboro, NC</p>	10/13/05
<p>“My Journey to the Land of Mathematics” Invited Talk for Sonya Kovalevskaya Women in Mathematics Day, Embry-Riddle University, Daytona Beach, FL</p>	05/13/05
<p>“My Journey to the Land of Mathematics” Invited Talk, Wake Technical Community College, Raleigh, NC</p>	03/26/05
<p>“Image Restoration and Linear Algebra” Colloquium, Appalachian State University, Boone, NC</p>	11/18/04
<p>“Quasi-Newton Methods for Image Restoration” SPIE International Symposium for Optical Science and Technology, Denver, CO</p>	08/06/04
<p>“Steepest Descent, CG, and Iterative Regularization of Ill-Posed Problems” 6th Annual IMACS meeting on Iterative Methods, Denver, CO</p>	03/30/03
<p>“Steepest Descent, CG, and Iterative Regularization of Ill-Posed Problems” SIAM Conference on Applied Linear Algebra, Williamsburg, VA</p>	07/16/03

Grants

External

- [8] “Supporting the STEM Pathway at Appalachian,” a UNC System Math Pathways grant awarded August 2019 with Eric Marland, Katie Mawhinney, Greg Rhoads, and Natasha Puckett (\$70,736)
- [7] “The Appalachian High Achievers in STEM,” an NSF grant (# 1742282) awarded January 2018 with Rahman Tashakkori, Brooke Hester, Jennifer Cecile, Jennifer McGee, and Cindy Norris (\$999,982)
- [6] “MPE Connecting Community Colleges,” a grant submitted on 9/30/15 with Eugene Florini (\$9,000)
- [5] “Appalachian Undergraduate Academy of Science,” an NSF grant (# 0756928) submitted on 9/18/2007 with Rahman Tashakkori, Nicole Bennett, Phillip Russell, and Barry Kurtz (\$1,555,868)
- [4] “Math-Biology Workshop,” a Shodor/ SC07 grant for Summer 2007 with Eric Marland and Rene Salinas (\$19,890)
- [3] 2006 MAA Tensor Grant, “Vertically Integrated Workshop for Women in Mathematics” (\$3100)
- [2] ASU Proposal #06-0088 “Feasibility Study for a PSM in Financial Mathematics at Appalachian State University” with Bill Bauldry, Brian Felkel, Joel Sanqui (\$3500)
- [1] 2005 MAA Tensor Grant, “Vertically Integrated Workshop For Women in Mathematics” (\$3000)

Internal

- [10] “Helping Underrepresented and First-Generation Students SOAR,” Diversity Grant sponsored by Appalachian State Research Office and awarded for Summer 2019 with Vicky Klima Carol Babyak (\$2400)
- [9] “Curriculum Mapping - Mathematics,” Sponsored by University Academic Assessment Council, Appalachian State University and awarded for Summer 2019 with Sarah Greenwald and Vicky Klima (\$1800)
- [8] “Curriculum Alignment (MAT 143 - MAT 10101),” Sponsored by Transfer Services Office, Appalachian State University and awarded for Fall 2018 with Alana Baird (\$700)
- [7] “Fourteen in 14,” Learning Technology Online Course Development, Appalachian State University, 10/13 (\$5000)
- [6] “Learning Outcomes for MAT 1010,” General Education Shared Learning Outcomes Development, Appalachian State University, 5/12 (\$250)
- [5] “Using Smartpen Technology to Teach Math Online,” Appalachian Foundation Fellows Grant, Appalachian State University, 2/11 (\$4810)
- [4] Faculty and Academic Instructional Mini-Grant, Appalachian State University, 7/06 (\$175)
- [3] Faculty and Academic Development Registration Grant, Appalachian State University, 12/05 (\$100)
- [2] Faculty and Academic Development URC Grant, Appalachian State University, 3/05 with Dan Caton (\$2900)

Workshops

Workshops Organized

<p>“Precalculus Professional Development for Stanly County Schools”</p> <p>Worked with all precalculus teachers in Stanly County to improve both teacher content knowledge and delivery.</p>	09/18 - 05/19
<p>“MPE” (follow up)</p> <p>Workshop with Community College Math and Science Faculty to modify and create lessons to incorporate sustainability topics in math and science courses. Funded through an NSF subgrant of MPE 2013⁺</p>	05/18
<p>“Calculus Alignment”</p> <p>Workshop to aid communication between Community College and Appalachian math faculty to align Calculus I and II funded by grant through the transfer services office</p>	10/16
<p>“MPE” (Mathematics of Planet Earth)</p> <p>Workshop with Community College Math and Science Faculty to learn how to incorporate sustainability topics in math and science courses. Funded through an NSF subgrant of MPE 2013⁺</p>	05/16
<p>“Connecting with Community Colleges”</p> <p>Workshop for faculty, administrators and advisors from regional Community College to begin understanding transfer challenges in the transfer process. Funded by the Mathematical Sciences Department at Appalachian.</p>	05/15

Workshops Attended

<p>“TILT (Transparency In Learning and Teaching)”</p> <p>Assessment redesign based off of the TILT framework (funded by CAE) Boone NC</p>	05/19
<p>“MPE2013⁺ Workshop on Education for the Planet Earth of Tomorrow”</p> <p>Panelist for discussion on including sustainability topics in math courses (funded by NSF).</p>	10/15
<p>“Redesign Institute”</p> <p>Course redesign based off of Dee Fink’s Book (funded by Hubbard Center) Boone NC</p>	05/15
<p>“PS-Future (Planning for a Sustainable Future) Workshops”</p> <p>Develop modules related to sustainability at the high school level (funded by NSF) Bedford, MA</p>	09/13, 03/14, 09/14, 09/15
<p>“VCTAL Workshops”</p> <p>Develop computational math modules at the high school level (funded by NSF) Bedford, MA</p>	03/12, 09/12, 03/13

<p>“BioMap Workshops” Develop math-biology modules at the high school level (funded by NSF) Bedford, MA</p>	03/11, 09/11
<p>“Image/Vision Based Problem Solving” SC2006 Education Program (funded by IEEE Computer Society and ACM) Tampa, FL</p>	11/06
<p>“Simple and Complex Discrete-time Population Models in Ecology” DIMAC, Reconnect Satellite Conference 2006: Morgan State University (funded by NSF) Baltimore, MD</p>	07/06
<p>“Image/Vision Based Problem Solving” SC2005 Education Program (funded by IEEE Computer Society and ACM) Seattle, WA</p>	11/05
<p>“The Mathematics of Medical Imaging” DIMAC, Reconnect Satellite Conference 2005: Spelman College (funded by NSF) Atlanta, GA</p>	07/05

Certifications & Awards

Teaching Certifications

Certificate of Course Recognition for meeting the QM standards for MAT 1020, 2019
Successful completion of “Independent Applying the QM Rubric (APPQMR)” Course, 2017
North Carolina Teacher Certification 6-12

Actuary Exams

Exam P/1 - passed May 2004
Exam FM/2 - passed November 2006

Teaching Awards and Honors

Appalachian State University College Excellence in Teaching Award, 2018
Transfer Champion Award, 2018
Honorary Inductee to Tau Sigma, National Honor Society for Transfer Students, Spring 2015
Nominated for the 2008-2009 Richard N. Henson Outstanding Advisor Award, ASU
Nominated for the Brantz Award for Outstanding Teaching in Freshman Seminar, ASU, 2006
Howard Hughes Medical Institute Fellowship, Emory University, 2004
Dean’s Teaching Fellowship, Emory University, 2003-2004