

Richard Klima

Education

Ph.D., Applied Mathematics, August 1997

North Carolina State University, Raleigh, NC

Advisor: Dr. E. L. Stitzinger

Dissertation: *Involutory Commutants of the Seventh Order with Applications to Algebraic Cryptography*

M.S., Applied Mathematics, May 1994

Minor: Statistics

North Carolina State University, Raleigh, NC

Advisor: Dr. E. L. Stitzinger

Thesis: *Discrete Logarithms in Finite Fields with Applications to Algebraic Cryptography*

B.S., Mathematics, May 1992

Minor: Business

Experience

Director: July 2019 –

First Year Seminar Program, Appalachian State University, Boone, NC

I serve in a department chair-like role, managing close to 200 course sections per academic year taught by nine full-time lecturers and many part-time instructors.

Professor: August 2012 –

Graduate Faculty: August 2002 –

Assistant Chair: July 2010 – June 2019

Associate Professor: August 2008 – August 2012

Graduate Director: June 2005 – June 2009

Assistant Professor: August 2002 – August 2008

Department of Mathematical Sciences, Appalachian State University, Boone, NC
Courses I have taught include Abstract Algebra II, Analytical Models, Applications of Modern Algebra, Brief Introduction to Mathematics, Calculus I, Calculus II, Coding Theory, Cryptology, Empirical Models, Game Theory, Introduction to Mathematics, Linear Algebra, Modern Algebra, Number Theory, and Voting Theory. I have also directed a master's thesis, three master's products of learning, eight master's directed research projects, eleven graduate teaching apprenticeships, eight senior honors theses for departmental honors students, eleven senior capstone projects, twelve independent studies, an internship, and two study abroad programs.

Faculty: August 2009 –

STEM Academic Mentor: July 2016 – June 2019

Honors College, Appalachian State University, Boone, NC

Courses I have taught include Math and Fairness in Democratic Elections, and Communicating in Secret. I have also directed nine senior honors theses for university honors students.

Visiting Assistant Professor: August 2000 – June 2002

Department of Mathematics, State University of New York, Oswego, NY

Courses I taught included Abstract Algebra, Applications of Abstract Algebra, Discrete Mathematics, Foundations of Mathematics, Linear Algebra, and Probability and Logical Thought.

Cryptologic Mathematician: June 1999 – August 2000
National Security Agency, Fort Meade, MD

Visiting Instructor: August 1997 – May 1999
Department of Mathematics, North Carolina State University, Raleigh, NC
Courses I taught included Applications of Abstract Algebra, and Calculus I.

High School Teacher: February 1992 – June 1992
Raleigh, NC

Publications

Books:

- *Cryptology: Classical and Modern, Second Edition*, with Dr. Neil Sigmon of Radford University, CRC Press, 2019
- *The Mathematics of Voting and Elections: A Hands-On Approach, Second Edition*, with Dr. Jonathan Hodge of Grand Valley State University, AMS (American Mathematical Society), 2018
- *Applied Abstract Algebra with Maple and MATLAB, Third Edition*, with Drs. Neil Sigmon of Radford University and Ernest Stitzinger of North Carolina State University, CRC Press, 2016
- *Cryptology: Classical and Modern, with Maplelets*, with Dr. Neil Sigmon of Radford University, CRC Press, 2012
- *Applications of Abstract Algebra with Maple and MATLAB, Second Edition*, with Drs. Neil Sigmon of Radford University and Ernest Stitzinger of North Carolina State University, CRC Press, 2007
- *Математика Выборов ("Election Mathematics")*, with Dr. Jonathan Hodge of Grand Valley State University, Moscow Center for Continuous Mathematical Education, 2007
- *The Mathematics of Voting and Elections: A Hands-On Approach*, with Dr. Jonathan Hodge of Grand Valley State University, AMS, 2005
- *Applications of Abstract Algebra with Maple*, with Drs. Neil Sigmon of Radford University and Ernest Stitzinger of North Carolina State University, CRC Press, 2000

Manuals:

- *Cryptology: Classical and Modern, Second Edition, Instructor's Manual*, with Dr. Neil Sigmon of Radford University, CRC Press, 2019
- *Applied Abstract Algebra with Maple and MATLAB, Third Edition, Instructor's Manual*, with Dr. Neil Sigmon of Radford University, CRC Press, 2016
- *Cryptology: Classical and Modern, with Maplelets, Instructor's Manual*, with Dr. Neil Sigmon of Radford University, CRC Press, 2012
- *The Mathematics of Voting and Elections: A Hands-On Approach, Instructor's Manual*, with Dr. Jonathan Hodge of Grand Valley State University, AMS, 2009

Refereed:

- *The Polish Cryptanalysis of Enigma*, with Dr. Neil Sigmon of Radford University, *The Electronic Journal of Mathematics and Technology*, February 2022
- *The Mathematics of QR Codes*, with Dr. Neil Sigmon and undergraduate student

Adam Downs of Radford University, *Proceedings of the 26th ATCM (Asian Technology Conference in Mathematics)*, December 2021

- *Recognizing the Polish Efforts in Breaking Enigma*, with Dr. Neil Sigmon of Radford University, *Proceedings of the 25th ATCM*, December 2020
- *The Navajo Code Talkers of World War II*, with Dr. Neil Sigmon of Radford University, Virginia Mathematics Teacher, November 2018
- *The Turing Bombe and its Role in Breaking the Enigma*, with Dr. Neil Sigmon of Radford University, *Proceedings of the 22nd ATCM*, December 2017
- *Mathematics and Fairness in Democratic Elections, The Journal of Undergraduate Mathematics and Its Applications (UMAP)/Interdisciplinary Lively Application Projects Modules: Tools for Teaching*, April 2010
- *Reed-Solomon Codes: A Tutorial and Java Toolbox*, with undergraduate student Augustus Miraglia of Appalachian State University, *The UMAP Journal*, April 2008
- *Elliptic Curve Cryptography with Java*, with Dr. Neil Sigmon of Radford University, *Mathematics and Computer Education*, March 2005
- *Amortization: An Application of Calculus*, with Dr. Robert Donnelly of Murray State University, *The College Mathematics Journal*, October 1999
- *Applying the Diffie–Hellman Key Exchange to RSA*, *The UMAP Journal*, April 1999
- *Elliptic Curve Cryptography with Maple*, with Drs. Neil Sigmon of Radford University and Ernest Stitzinger of North Carolina State University, *MapleTech*, June 1998

Contributed:

- *Enigma: An Analysis and Maplet Simulator*, with Dr. Neil Sigmon of Radford University, *Proceedings of the 26th ICTCM (International Conference on Technology in Collegiate Mathematics)*, March 2015
- *Using Maplets in Teaching Cryptology*, with Dr. Neil Sigmon of Radford University, *Proceedings of the 25th ICTCM*, March 2014
- *Using Graphs to Break Vigenère Ciphers*, with Dr. Neil Sigmon of Radford University, *Proceedings of the 24th ICTCM*, March 2013
- *A Java Simulator for Voting Methods*, *Proceedings of the 20th ICTCM*, March 2009
- *Elementary Coding Theory Including Hamming and Reed-Solomon Codes with Maple and MATLAB*, with Dr. Neil Sigmon of Radford University, *Proceedings of the 18th ICTCM*, February 2007
- *Some Elementary Cryptography Including RSA on the TI-92+ and Voyage 200*, with Dr. Neil Sigmon of Radford University, *Proceedings of the 17th ICTCM*, March 2006
- *Focused, Compressed Video Tutorials*, with Drs. William Bauldry and Brian Felkel of Appalachian State University, *Proceedings of the 16th ICTCM*, October 2004

Other:

- *Abstract Algebra*, an online course with Dr. Vicky Klima of Appalachian State University, LEARN NC, University of North Carolina at Chapel Hill, August 2008
- *(Title Classified)*, National Security Agency, August 2000

- *Maple Supplements for Calculus I*, with Drs. Joseph Marlin of North Carolina State University and John Matthews of The University of Tennessee at Chattanooga, North Carolina State University, August 1997
- *Involutory Commutants of the Seventh Order with Applications to Algebraic Cryptography*, a dissertation under the direction of Dr. Ernest Stitzinger of North Carolina State University, Graduate School, North Carolina State University, April 1997
- *Examining Randomness in Certain Sequences*, with Dr. Mark Sellers of the National Security Agency, Center for Research in Scientific Computation, North Carolina State University, July 1996
- *Discrete Logarithms in Finite Fields with Applications to Algebraic Cryptography*, a master's project under the direction of Dr. Ernest Stitzinger of North Carolina State University, Department of Mathematics, North Carolina State University, May 1994

Presentations

Invited Academic:

- *The Mathematics of QR Codes*, with Dr. Neil Sigmon and undergraduate student Adam Downs of Radford University, ATCM, December 2021
- *Recognizing the Polish Efforts in Breaking Enigma*, with Dr. Neil Sigmon of Radford University, ATCM, December 2020
- *Arrow's Actual Impossibility Theorem*, MAA Southeastern Section Meeting, March 2020
- *Explaining the Impossible: Kenneth Arrow's Nobel Prize Winning Theorem on Elections*, CSEMS Scholarship Seminar Series, Appalachian State University, October 2007; Murray State University, October 2007; University of North Carolina at Asheville, February 2008; Wake Forest University, March 2008; CSAM Scholarship Seminar Series, Morehead State University, April 2008; Radford University, September 2008; Catawba Valley Community College, March 2012; MSEC Science Seminar Series, Appalachian State University, October 2018
- *The Turing Bombe and its Role in Breaking the Enigma*, with Dr. Neil Sigmon of Radford University, ATCM, December 2017
- *Math?*, NCCTM Regional Math Contest, April 2016; Mu Alpha Theta Honor Society, Ashe County High School, November 2016
- *Donald Trump, Jesse Ventura, and Other Electoral Inconveniences*, Central Carolina Community College, March 2016
- *Deciphering the Navajo Code: The Real Story of the Windtalkers*, Catawba Valley Community College, April 2013
- *A Mathematician's Views on Minesweeper, Partying, and Card Shuffling*, Misfit Lecture Series, Watauga Residential College, Appalachian State University, January 2005; Beyond the Syllabus Lecture Series, Appalachian Honors Association, Appalachian State University, November 2009
- *Ralph Nader, Jesse Ventura, and Other Electoral Inconveniences*, Murray State University, October 2007
- *And the Winner Is ... The Borda Count Method*, Wilkes Central High School, November 2005
- *Nader, Ventura, and Other Electoral Inconveniences*, Discrete Mathematics Workshop Series for High School Teachers, Appalachian State University, July

2005

- *A Moore-Style Course on the Mathematics of Voting and Elections*, with Dr. Jonathan Hodge of Grand Valley State University, Legacy of R. L. Moore Conference, May 2005
- *A Mathematician's Views on Minesweeper, Card Shuffling, and Psychic Ability*, Murray State University, November 2004
- *Loan Amortization: A Cool Application of Calculus*, High Point University, October 2003
- *Voting and Apportionment: The Paradoxes of Democracy*, Discrete Mathematics Workshop Series for High School Teachers, Appalachian State University, January 2003
- *Recent Advances in the Cryptanalysis of the Two-Message Problem*, Murray State University, November 2002
- *(Title Classified)*, National Security Agency, July 2000
- *Discrete Logarithms in Finite Fields with Applications to Algebraic Cryptography*, Lynchburg, VA, February 1995

Invited Media:

- *The Edge*, WXYB Tampa, September 2005
- *The Edge*, WXYB Tampa, July 2005

Refereed:

- *Integrating Reed-Solomon Codes into QR Codes*, with Dr. Neil Sigmon and undergraduate student Adam Downs of Radford University, AMS Joint Mathematics Meeting, April 2022
- *Arrow's Actual Impossibility Theorem*, AMS Central-Western Sectional Meeting, March 2019
- *The Logic Behind the Turing Bombe's Role in Breaking the Enigma*, with Dr. Neil Sigmon of Radford University, AMS/MAA (Mathematical Association of America) Joint Mathematics Meeting, January 2019
- *Teaching Cryptology to Students in Non-Technical Disciplines*, with Dr. Neil Sigmon of Radford University, AMS/MAA Joint Mathematics Meeting, January 2017
- *Enigma: A Combinatorial Analysis and Maplet Simulator*, with Dr. Neil Sigmon of Radford University, ICTCM, March 2014; MAA Southeastern Section Meeting, March 2015; AMS/MAA Joint Mathematics Meeting, January 2017
- *Increasing Student Interest in Mathematics Using Cryptography*, with Dr. Neil Sigmon of Radford University, AMS/MAA Joint Mathematics Meeting, January 2016
- *A New Method for Musical Encryption*, with undergraduate student Olivia Vanarthos of Appalachian State University, MAA Southeastern Section Meeting, March 2015
- *Using Maplets in Teaching Cryptology*, a computer minicourse with Dr. Neil Sigmon of Radford University, ICTCM, March 2013
- *Estimating Success When Combining RSA and the Diffie-Hellman Key Exchange*, with Dr. Neil Sigmon of Radford University, AMS/MAA Joint

Mathematics Meeting, January 2013

- *Using Graphs to Break Vigenère Ciphers*, with Dr. Neil Sigmon of Radford University, ICTCM, March 2012; AMS/MAA Joint Mathematics Meeting, January 2013
- *Simulating a Verbal Translation of the Navajo Code; a Completed Version*, with Dr. Neil Sigmon of Radford University, AMS/MAA Joint Mathematics Meeting, January 2011
- *A Maplet for Encoding, Decoding, and Correcting Errors in Golay Codes*, AMS/MAA Joint Mathematics Meeting, January 2009
- *A Java Simulator for Voting Methods*, AMS/MAA Joint Mathematics Meeting, January 2008; ICTCM, March 2008
- *Constructing Maplets, Demonstrated Through Cryptography Including AES and RSA*, a computer minicourse with Drs. William Bauldry of Appalachian State University and Neil Sigmon of Radford University, ICTCM, February 2007
- *Using Maplets and Java to Teach Reed-Solomon Codes*, with Dr. Neil Sigmon of Radford University, AMS/MAA Joint Mathematics Meeting, January 2007
- *Cryptography in the Classroom: Pedagogic Secrets Decrypted*, a panel session with Drs. William Bauldry of Appalachian State University, Edmund Lamagna of the University of Rhode Island, and Douglas Meade of the University of South Carolina, ICTCM, March 2006
- *Elementary Coding Theory Including Hamming and Reed-Solomon Codes with Maple and MATLAB*, a computer minicourse with Dr. Neil Sigmon of Radford University, ICTCM, March 2006
- *Topics and Applications of Discrete Mathematics*, with Dr. Mark Ginn of Appalachian State University, NCCTM (North Carolina Council of Teachers of Mathematics) Conference, October 2005
- *Some Sports-Related Election Methods and Ranking Procedures*, AMS/MAA Joint Mathematics Meeting, January 2005
- *Some Elementary Cryptography Including RSA on the TI-92+ and Voyage 200*, a calculator workshop with Dr. Neil Sigmon of Radford University, ICTCM, October 2004
- *Using the World Wide Web to Disseminate Focused, Compressed Video Tutorials*, with Dr. Brian Felkel of Appalachian State University, AMS/MAA Joint Mathematics Meeting, January 2004
- *Focused, Compressed Video Tutorials*, a computer minicourse with Drs. Brian Felkel and William Bauldry of Appalachian State University, ICTCM, November 2003
- *Elliptic Curve Cryptography with Java*, with undergraduate student Diana Alexander of the State University of New York at Oswego, AMS/MAA Joint Mathematics Meeting, January 2002
- *Involutory Commutants of the Seventh Order with Applications to Algebraic Cryptography*, MAA Southeastern Section Meeting, March 1997

Recognitions

Grants:

- Grant of \$180,000 (funded), Student STEM Enrichment Program *Securing the*

Future, Burroughs Wellcome Fund, September 2021

- Grant of \$3000 (funded), Office of Institutional Research, Assessment, and Planning, Appalachian State University, November 2020
- Grant of \$180,000 (not funded), Student STEM Enrichment Program, Burroughs Wellcome Fund, September 2020
- Grant of \$3000 (funded), Office of Institutional Research, Assessment, and Planning, Appalachian State University, November 2019
- Grant of \$180,000 (not funded), Student STEM Enrichment Program, Burroughs Wellcome Fund, September 2019
- Grant of \$1000 (funded), General Education Program, Appalachian State University, May 2008
- Fellowship of \$1700 (funded), General Education Program, Appalachian State University, September 2007
- Grant of \$7750 (funded), Educational Advancement Foundation, January 2004

Awards:

- Most Helpful Faculty & Staff, Office of Student Success, Appalachian State University, 2015–2016, 2017–2018, 2018–2019, and 2019–2020
- Invited participant, Intercultural Teaching and Learning Fellows Program, Appalachian State University, 2019
- Selected participant, Academic Leadership Development Program, Appalachian State University, 2017–2018
- Faculty Member of Distinction, Appalachian Magazine, Appalachian State University, 2016
- Wayne D. Duncan Faculty Enrichment and Teaching Fellowship, General Education Program, Appalachian State University, September 2007
- Invited funded participant, Legacy of R. L. Moore Conference, Educational Advancement Foundation, May 2005
- Invited funded participant, Legacy of R. L. Moore Conference, Educational Advancement Foundation, May 2004
- Selected participant, Industrial Mathematics Modeling Workshop for Graduate Students, Center for Research in Scientific Computation, North Carolina State University, July 1996
- Selected participant, Preparing the Professoriate Program, North Carolina State University, 1995–1996
- Outstanding Graduate Teaching Assistant, North Carolina State University, 1993–1994

Nominations:

- Academy of Outstanding Teachers, College of Arts and Sciences, Appalachian State University, October 2009
- William C. Strickland Outstanding Young Faculty Award, College of Arts and Sciences, Appalachian State University, October 2007
- William H. Plemmons Leadership Medallion, Appalachian State University, December 2006

- William C. Strickland Outstanding Young Faculty Award, College of Arts and Sciences, Appalachian State University, October 2005

**Service –
University,
Discipline**

Committees, Councils, and Task Forces:

- Chair, First Year Seminar Faculty Coordinating Committee, Appalachian State University, since August 2019
- Chair, Harvey R. Durham Outstanding Freshman Advocate Award Selection Committee, Appalachian State University, since August 2019
- Chair, University College Search Committee, Appalachian State University, since August 2019
- Member, General Education Student Mentoring Award Selection Committee, Appalachian State University, since August 2019
- Member, Rennie W. Brantz Award for Outstanding Teaching in First Year Seminar Selection Committee, Appalachian State University, since August 2019
- Member, University College Academic Support Sub-Council, Appalachian State University, since August 2019
- Member, University College Council, Appalachian State University, since August 2019
- Member, University College Departmental Personnel Committee, since August 2019
- Member, General Education Council, Appalachian State University, August 2008 – May 2010 and since August 2019
- Member, Wayne D. Duncan Faculty Enrichment and Teaching Fellowship Selection Committee, Appalachian State University, June 2022
- Member, First Semester Suspension Appeals Committee, Appalachian State University, May 2022
- Member, General Education Non-Tenure-Track Faculty Award for Excellence in Teaching, May 2022
- Member, University College Student Advising Award Selection Committee, Appalachian State University, May 2022
- Member, General Education Revision Task Force, Appalachian State University, August 2021 – May 2022
- Member, Global Health and Safety Committee, Appalachian State University, August 2021
- Member, General Education Listening Task Force, Appalachian State University, August 2020 – May 2021
- Member, Honors College Faculty Review Committee, Appalachian State University, August 2016 – June 2019
- Member, Chancellor’s Scholarship Committee, Appalachian State University, August 2016 – June 2019
- Member, Arts and Sciences Council, Appalachian State University, August 2010 – June 2019
- Member, Council of Chairs, Appalachian State University, August 2010 – June 2019

- Member, Fulbright Scholarship Review Committee, Appalachian State University, August 2016 – May 2018
- Member, Director of General Education Search Committee, Appalachian State University, January–March 2018
- Member, Dean of the Honors College Search Committee, Appalachian State University, August 2016 – May 2017
- Member, Honors College Academic Program Approving Committee, Appalachian State University, August 2011 – May 2014
- Member, SACS Compliance on Federal Mandates Committee, Appalachian State University, October 2010 – September 2012
- Member, Quantitative Literacy Faculty Coordinating Committee, Appalachian State University, August 2010 – May 2012
- Member, General Education Review Task Force, Appalachian State University, November 2010 – June 2011
- Member, Director of General Education Search Committee, Appalachian State University, May–June 2010
- Chair, Quantitative Literacy Faculty Coordinating Committee, Appalachian State University, March 2008 – May 2010
- Member, General Education Awards Committee, Appalachian State University, April 2008
- Member, College of Arts and Sciences Thesis Award Committee, Appalachian State University, April 2008

Referee, Reviewer, and Editor:

- Associate Editor, *The Electronic Journal of Mathematics and Technology*, since February 2013
- Referee, academic paper, *The American Mathematical Monthly*, May 2022
- Referee, academic paper, ATCM, October 2021
- Referee, academic paper, ATCM, September 2021
- Referee, academic paper, ATCM, August 2021
- Referee, academic paper, ATCM, September 2020
- Second reader, senior honors thesis (chemistry), Appalachian State University, August 2019
- Second reader, senior honors thesis (computer science), Appalachian State University, June 2019
- Second reader, senior honors thesis (computer science), Appalachian State University, April 2019
- Reviewer, student poster session, NCHC (National Collegiate Honors Council) annual meeting, March 2019
- Referee, academic paper, *The UMAP Journal*, February 2019
- Judge, student poster session, NCHC annual meeting, November 2018
- Referee, academic paper, *The Electronic Journal of Mathematics & Technology*, April 2018

- Referee, academic paper, *Cryptologia*, March 2018
- Reviewer, student poster session, NCHC annual meeting, March 2018
- Referee, academic paper, *The IMA Journal of Applied Mathematics*, January 2018
- Judge, student poster session, NCHC annual meeting, November 2017
- Referee, academic paper, *Cryptologia*, August 2017
- Referee, academic paper, *The IMA Journal of Applied Mathematics*, August 2017
- Judge, North Carolina Region 7 Science and Engineering Fair, Appalachian State University, December 2016
- Referee, academic paper, *The Electronic Journal of Mathematics & Technology*, May 2016
- Referee, academic paper, *Involve*, December 2015
- Judge, North Carolina Region 7 Science and Engineering Fair, Appalachian State University, December 2014
- Reviewer, promotion credentials, Coastal Carolina University Department of Mathematics and Statistics, December 2014
- Reviewer, *MA 232: Abstract Algebra II* (course), Saylor Foundation, May 2013
- Referee, academic paper, *The Rose-Hulman Undergraduate Mathematics Journal*, March 2013
- Referee, academic paper, *The Electronic Journal of Mathematics & Technology*, December 2012
- Referee, academic paper, *The EURO Journal on Decision Processes*, November 2012
- Reviewer, *CS 409: Cryptography* (course), Saylor Foundation, October 2012
- Second reader, senior honors thesis (computer science), Appalachian State University, April 2012
- Second reader, senior honors thesis (english), Appalachian State University, April 2012
- Referee, academic paper, *Involve*, January 2011
- Referee, academic paper, *The UMAP Journal*, July 2010
- Referee, academic paper, *The UMAP Journal*, June 2010
- Referee, academic paper, *The Centroid*, October 2003
- Reviewer, *Abstract Algebra* (book), Addison Wesley, February 2003

Other:

- Participant, *Math and Democracy* Panel Discussion, Meredith College, October 2021
- Participant, Black Life in America, Across the Disciplines Podcast Series, Appalachian & the Community Together, Appalachian State University, October 2020
- Faculty Representative, Harry S Truman Scholarship, Appalachian State University, August 2016 – June 2019
- Took students from my HON 2515 class to tour the U.S. National Cryptologic

Museum in Fort Meade, MD, April 2019

- Organizer, MAA Invited Paper Session, with Dr. Eric Marland of Appalachian State University, AMS/MAA Joint Mathematics Meeting, January 2019
- Consultant, Writing in the Discipline, Writing Across the Curriculum Program, Appalachian State University, August 2017 – May 2018
- Moderator, Celebration of Student Research and Creative Endeavors Session, Appalachian State University, April 2015
- Took students from my HON 2515 class to the Bernard Lecture at Davidson College, October 2012
- Moderator, Faculty/Student Exchange Orientation Session, Appalachian State University, August 2012
- Moderator, Faculty/Student Exchange Orientation Session, Appalachian State University, August 2011
- Member, *Learning Matters: Inquiry, Integration, and Active Learning* Panel Discussion, New Faculty Orientation, Appalachian State University, August 2009
- Consultant, Partners for Mathematics Learning Project, Meredith College, September–December 2008
- Moderator, Faculty/Student Exchange Orientation Session, Appalachian State University, August 2006

**Service –
Academic
Department**

Committees:

- Member, Post-Tenure Review Committee, since August 2020
- Member, Promotion and Tenure Committee, since August 2014
- Chair, Strategic Planning Committee, August 2021 – May 2022
- Chair, Promotion and Tenure Documents Integration Committee, August 2020 – May 2021
- Member, Departmental Personnel Committee, August 2005 – May 2007, August 2008 – May 2009, August 2010 – May 2012, and August 2019 – May 2020
- Member, Curriculum Committee, August 2019 – May 2020
- Member, Writing in the Discipline Assessment Committee, August 2016 – May 2019
- Chair, Curriculum Committee, August 2010 – May 2019
- Member, Chair Advisory Committee, August 2010 – May 2019
- Member, Academic Support Associate Search Committee, February 2019
- Member, Administrative Specialist Search Committee, February 2019
- Member, Tenure-track Faculty Search Committee, October 2018 – March 2019
- Member, Distinguished Professor of Mathematics Education Position Review Committee, August–November 2016
- Member, Distinguished Professor of Mathematics Education Post-Tenure Review Committee, August–November 2016
- Member, BA/BS Mathematics Programs Assessment Committee, August 2012 – May 2013

- Member, Calculus I and II Textbook Committee, February 2013
- Member, One-Hour Quantitative Literacy Course Committee, February 2013
- Member, MA Mathematics, Secondary Education Program Assessment Committee, August 2007 – May 2012
- Member, Technology Support Personnel Search Committee, August 2010
- Member, Graduate Teaching Assistant Supervision Committee, January–April 2007
- Member, MAT 1010 Review Committee, January–April 2007
- Chair, MAT 1010 Review Committee, September–December 2006
- Member, Steering Subcommittee on Modern Algebra, April 2006
- Member, Steering Subcommittee on Logic and Proof, March 2006
- Member, Steering Subcommittee on Linear Algebra and Differential Equations, February–April 2005
- Chair, MAT 1010 Review Committee, September 2004 – April 2005
- Member, Steering Subcommittee on General Curriculum, December 2003

Other:

- Member, master's thesis committee, Spring 2022
- Took students from my MAT 3510 and MAT 5500 classes to tour the U.S. National Cryptologic Museum in Fort Meade, MD, April 2018
- Member, *Careers in Mathematics* Panel Discussion, Association of Women in Mathematics, Appalachian State University, November 2016
- Took students from my MAT 3510, MAT 4010, and MAT 5530 classes to tour the U.S. National Cryptologic Museum in Fort Meade, MD, April 2015
- Supervisor, graduate teaching apprentices, Spring 2003, Fall 2003 (2), Spring 2006, Fall 2006, Spring 2007, Fall 2007, Fall 2008, Spring 2009, Spring 2013, and Fall 2014
- Took students from my MAT 4010 and MAT 5530 classes to tour the U.S. National Cryptologic Museum in Fort Meade, MD, November 2012
- Supervisor, graduate teaching assistants, Fall 2005 (2), Spring 2006 (3), Fall 2006 (3), Spring 2007, Fall 2007, Spring 2008, Fall 2008, Spring 2009 (2), Fall 2011, and Spring 2012
- Took students from my MAT 3510 and MAT 5220 classes to tour the U.S. National Cryptologic Museum in Fort Meade, MD, April 2011
- Colloquium *Cryptology with Maplets: How I Spent My OCSA Writing About John F. Kennedy, Nicolas Cage, and Mick Jagger*, September 2010
- Faculty Sponsor, ASU Math Club, with Dr. Vicky Klima of Appalachian State University, August 2003 – May 2010
- Graduate seminars (three) on case studies in mathematics teaching, February 2009
- Graduate seminar on constructing vitas and personal statements, October 2008
- Graduate seminar on writing tests, September 2008

- Organizer/proctor, William Lowell Putnam Contest exam, 2005–2008
- Colloquium *Explaining the Impossible: Kenneth Arrow's Nobel Prize Winning Theorem on Elections*, September 2007
- Graduate seminar on constructing syllabi, January 2006 and August 2007
- Took students from my MAT 3510 class to tour the U.S. National Cryptologic Museum in Fort Meade, MD, April 2007
- Graduate seminar on constructing vitas and personal statements, January 2007
- Graduate seminar on writing tests, August 2006
- Took students from my MAT 3510 class to tour the U.S. Capitol Building in Washington, DC, April 2005
- Colloquium *Some Elementary Cryptography Including RSA on the TI-92+ and Voyage 200*, November 2004
- Colloquium *Mathematics Through Games*, November 2003
- Took students from my MAT 3510 class to tour the U.S. National Cryptologic Museum in Fort Meade, MD, April 2003
- Colloquium *Amortization: An Application of Calculus*, February 2003