

Department of Mathematics
 Ithaca College
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 Updated: 02/23/2022

Employment

Ithaca College	Professor	Aug 2015 - present
Ithaca College	Department Chair	Aug 2015 - May 2021
Ithaca College	Associate Professor	Aug 2007 - Aug 2015
Ithaca College	Assistant Professor	Aug 2001 - May 2007

Education

Ph.D. in Mathematics, Cornell University, August 2001 Advisor: John H. Hubbard.
 M.S. in Mathematics, Cornell University, August 1998.
 B.A. in Mathematics, Ithaca College, May 1995, *Summa Cum Laude*.

Scholarly Interests

Dynamical Systems, Fractal Geometry, Undergraduate Research, Teacher Education,
 Cryptology

Publications (peer reviewed)

- David Brown (2014) Experimental mathematics for the first year student, *PRIMUS: Problems, Resources, and Issues in Mathematics Undergraduate Studies*, 24: 4, 281-293.
- K. Ahrens*, D.A. Brown & A. Kramer* (2014) Convergence of m -bonacci golden ratios, *International Journal of Mathematics Education in Science and Technology*, 45:4, 618-624.
- P. Bliss* & D. Brown (2009) Geometric properties of three-dimensional fractal trees, *Chaos, Solitons, & Fractals*, 42:1, 119-124.
- D. Brown, J. Maceli & O. Yürekli (2008) Identities and Parseval type relations for the L_2 -transform, *Applied Mathematics and Computation*, 196:1, 426-432.
- D. Brown, N. Dernek & O. Yürekli (2007) Identities for the $\mathcal{E}_{2,1}$ -transform and their applications, *Applied Mathematics and Computation*, 187:2, 1557-1566.
- D. Brown & O. Yürekli (2007) Undergraduate research in mathematics as a curricular option, *International Journal of Mathematics Education in Science and Technology*, 38:5, 571-580.
- D. Brown, R. Frongillo* & E. Lock* (2007) Symmetric fractal trees in three dimensions, *Chaos, Solitons, & Fractals*, 32:2, 284-295.
- D. Brown & M. Halstead* (2007) Super-attracting cycles for the cosine-root family, *Chaos, Solitons, & Fractals*, 31:5, 1191-1202.
- D. Brown, N. Dernek & O. Yürekli (2006) Identities for the exponential integral and the complementary error transforms, *Applied Mathematics and Computation*, 182:2, 1377-1384.
- D. Brown & O. Yürekli (2006) Integrating inquiry/discovery based activities into the mathematics curriculum, *Mathematicians and Education Reform Forum Newsletter*, 19:1, 4-10.

Publications (peer reviewed) - continued

D. Brown, C. Epstein* & W. Sendewicz* (2005) Structure of the pathlength set of asymmetric trees, *Fractals*, 13:4, 293-297.

D. Brown, E. Heinzman* (2004) Necessary conditions for cyclic elements on elliptic curves, *Pi Mu Epsilon Journal*, 12:1, 1-8.

D. Brown, D. Tang* & L. Monk* (2004) Identities for generalized Fibonacci numbers, *Intl. Journal of Math Education in Science and Technology*, 35:3, 436-439.

D. Brown, A. O'Hanlon* and P. Howard* (2004) Pathlength and tree height in asymmetric binary branching fractal trees, *Missouri Journal of Mathematical Sciences*, 16:2, 88-103.

Teichmüller Theory and Applications to Geometry, Topology, and Dynamics, by John H. Hubbard, with contributions by A. Douady, W. Dunbar, R. Roeder, S. Bonnett, D. Brown, A. Hatcher, C. Hruska, S. Mitra. Textbook published by Matrix Editions, 2006.

Undergraduate research experience at Ithaca College, D. Brown & O. Yürekli, Proceedings of the Third International Conference on the Teaching of Mathematics, Istanbul, Turkey, June/July 2006.

Software Application (peer reviewed)

S. Constable* and D. Brown. 2012, *Intercepting ICBMs in Three Dimensions*, Available: <http://demonstrations.wolfram.com/InterceptingICBMsInThreeDimensions/>

(* indicates undergraduate student)

Competitive and Peer Reviewed Grants - awarded

Ithaca College REU in Dynamical Systems, [NSF-REU #1950358], 2020-2024, \$287,672. T. Galanthay (PI), D. Visscher (Co-PI), D. Brown (Senior Personnel). Awarded August 2020.

STEM Community Building to Support Academic Success and Retention of Low-Income Students, [NSF-DUE #1930351], 2019-2024, \$648,416. K. Sullivan (PI, Physics), J. Barr (Co-PI, Computer Science), D. Brown (Co-PI, Math), M. Thomas (Co-PI, Math), Stacia Zabusky (Co-PI, H&S Dean's Office). Awarded August 2019.

Ithaca College Robert Noyce Teaching Scholarship Program, [NSF-DUE #1136320], 2011-2016, \$1,197,000. M. Rogers (Physics), D. Brown (co-PI), A. Weinberg (Math), M. Price (Physics), & L. Hanrahan (Education). Awarded, August 2011.

GeoGebra 2010 Conference in North America, [NSF-DRL #1014671], 2010-2011, \$50,000. D. Brown, D. Novak (Math). Awarded, March 2010.

REU Sites: Research Experiences For Undergraduates in Virtual Reality, Robotics and Visualization, [NSF-IIS #0648211], 2007-2010, \$212,088, with S. Stansfield (Computer Science). Awarded, March 2007.

REU Sites: Research Experiences For Undergraduates in Virtual Reality, Robotics and Visualization, [NSF-CNS #0353687], 2004-2007, \$165,603, with S. Stansfield (Computer Science). Awarded, March 2004.

Competitive and Peer Reviewed Grants - Unfunded

Supporting rural districts' implementation of the mathematics Common Core Standards through a Regional Collaborative model, [NSF-DRL MSP 1440875], 2014-2019, \$4,988,985. D. Brown (co-PI), C. Callard (Univ. of Rochester), J. Choppin (Univ. of Rochester), & M. Huntley (Cornell University). Submitted March 2014; Declined August 19, 2014.

Invited and Contributed Presentations

Crimes & Codes - Stolen Treasure, Rumrunners, and Zodiac, Ithaca College Math Colloquium, April 11, 2022.

World War II Cryptology - The Enigma Machine, Ithaca College Math Colloquium, November 15, 2021.

Revolutionary War and Civil War Cryptography, Ithaca College Math Colloquium, September 16, 2019.

The World of Complex Dynamics, MAA Seaway Section Distinguished Lecture, Utica College, April 25, 2019.

Revolutionary War and Civil War Spycraft and Cryptology, MAA Seaway Section Distinguished Lecture, Hobart & Williams Smith Colleges, March 27, 2019.

Magic Squares and Topology, MAA Seaway Section Distinguished Lecture, SUNY Plattsburgh, November 2, 2018.

Revolutionary War and Civil War Spycraft and Cryptology, MAA Seaway Section Distinguished Lecture, October Speakers Series, Niagara University, October 1, 2018.

Cryptology in the American Revolutionary War, MAA Seaway Section Distinguished Lecture, St. Bonaventure University, September 13, 2018.

Using Declassified Intelligence Documents in a Cryptology Course, AMS/MAA Joint Mathematics Meeting, Atlanta, GA, January 2017.

Ithaca College Robert Noyce Teacher Scholarship Program, Joint AMS/MAA Mathematics Meeting, San Antonio, TX, January 2015.

Ithaca College Robert Noyce Teacher Program, Joint AMS/MAA Mathematics Meeting, Baltimore, MD, January 2014.

The Ithaca College Noyce Teaching Scholarship Program, Eighth Annual NSF Robert Noyce Teacher Scholarship Program Conference, Washington, D.C., May 2013.

Experimental Mathematics: Innovation and Pedagogy, AMS/MAA Joint Mathematics Meeting, San Diego, CA, January 2013.

Rolling Wheels: Explore Curve Sketching via GeoGebra and Mathematica, AMS/MAA Joint Mathematics Meeting, Boston, MA, January 2012.

From Inquiry to Research - Fostering Research with Undergraduates, AMS/MAA Joint Mathematics Meeting, San Francisco, CA, January 2010.

Experimentation in Mathematics and the First Year Student, MAA Seaway Section Keynote Speaker, Rochester Institute of Technology, April 2009.

Numbers, Trees and Secrets: Getting students to ask questions, MAA Alder Award presentation, Mathfest, Madison, WI, August 2008.

Fostering undergraduate research, MAA Seaway Sectional meeting panel discussion, Syracuse, NY, April 2008.

Mathematical Experimentation: A First Year course for majors, International Conference on Technology in Collegiate Mathematics, San Antonio, TX, March 2008.

New Directions in Undergraduate Mathematics, COMPASS POINTS workshop, Golden, CO, October 2006.

Undergraduate Research Experience in Mathematics at Ithaca College, Third International Conference on the Teaching of Mathematics, Istanbul, Turkey, June/July 2006.

Integrating Discovery/Research into the Mathematics Curriculum, MAA Seaway Section Meeting, NExT Workshop, Ithaca College, April 2006.

Experimental Mathematics and Writing: Motivating First Year Students, AMS/MAA Joint Mathematics Meeting, San Antonio, TX, January 2006.

Transforming Student Learning through an Exploration/Research Curricular Approach, with O. Yürekli, invited session leaders, Mathematicians and Education Reform (MER) Forum Workshop on Excellence in Undergraduate Mathematics, Arizona State University, December 2005.

Experimental Mathematics and Writing for First Year Math Students, Math. Assoc. of America Seaway Section meeting, SUNY Geneseo, October 2005.

The Senior Seminar or "Capstone" Experience for Undergraduate Mathematics Majors, MAA Panel Discussion (invited panelist), AMS/MAA Joint Mathematics Meeting, Atlanta, GA, January 2005.

Undergraduate Research Course Sequence at Ithaca College, AMS/MAA Joint Mathematics Meeting, Atlanta, GA, January 2005.

Dynamics of Entire Transcendental Functions, MAA Seaway Sectional Meeting, SUNY Cortland, April 2004.

Engaging in Research with Undergraduates, Graduate Student Seminar, Cornell University, February 2004.

Undergraduate Research Courses at Ithaca College, AMS/MAA Joint Mathematics Meeting, Phoenix, AZ, January 2004.

Involving Teacher Education Students in Undergraduate Research, AMS-MER Excellence in Undergraduate Mathematics Conference, Ithaca, NY, March 2003.

Addressing the Needs of Secondary Education Students in Undergraduate Research, AMS/MAA Joint Mathematics Meeting, Baltimore MD, January 2003.

Generating undergraduate research projects via metric geometry, MAA Seaway Section meeting, SUNY Potsdam, November 2002.

Universality of the Mandelbrot Set, Ithaca College Colloquium Series, Ithaca College, October 2002.

A Distant Cousin of the Mandelbrot Set, MAA Seaway Section meeting, SUNY Brockport, April 2002.

An Undergraduate Research Experience with Technology, with O. Yürekli, International Conference on Technology in Collegiate Mathematics, Baltimore, MD, November 2001.

Thurston Algorithm for non-postsingularly finite polynomials and exponentials, AMS Special Session on Number Theory, Holomorphic Dynamics and Algebraic Dynamics, AMS Sectional Meeting, Williams College, October 2001.

Spider Algorithms: Combinatorics and Teichmüller Theory, The Dynamical Odyssey, CIRM, Marseille France, February 2001.

Graduate Outreach - Exploring Mathematics in Elementary and High School, with K. Nyman, MAA Seaway Sectional Meeting, SUNY Oswego, April 2000.

Follow the Orbits - An Introduction to Dynamical Systems, Sophomore Seminar, Ithaca College, February 2000.

Univalent Mappings and the Schwarzian Derivative, MAA Seaway Sectional Meeting, Adirondack Community College, November 1999.

Mapmaking and the Geometry of Surfaces, Math/CS Seminar, William Smith and Hobart Colleges, May 1999.

Modified Spider Algorithm, Special Conference on Complex Dynamics, University of Arkansas, Fayetteville, April 1999.

Professional Development Workshops for K-12 Teachers

Cryptology from Polyalphabetic to Public-key, NYS Master Teachers Program-Southern Tier, Binghamton University, April 2, 2019.

The Power of Remainders - Modular Arithmetic, NYS Master Teachers Program-Southern Tier, Binghamton University, November 14, 2018.

The Mathematics of Tilings, NYS Master Teachers Program-Southern Tier, Binghamton University, March 27, 2017.

Algebra and Geometry Content Workshops, GST BOCES, Painted Post, NY, December 19, 2017.

The Mathematics of Puzzles, NYS Master Teachers Program-Southern Tier, Binghamton University, September 26, 2017.

Math and Society, Rochester Area K12 Professional Development Workshops, University of Rochester, July 11-13, 2017.

The Mathematics of Magic Squares, NYS Master Teachers Program-Southern Tier, Vestal Middle School, March 21, 2017.

Networks, Topology, and Magic, NYS Master Teachers Program-Southern Tier, Vestal Middle School, October 4, 2016.

Social Choice, NYS Master Teachers Program-Southern Tier, Vestal Middle School, March 9, 2016.

The 4-numbers Game, NYS Master Teachers Program-Southern Tier, Vestal Middle School, October 21, 2015.

Using Technology to Explore Mathematics, Rochester Area K12 Professional Development Workshops, University of Rochester, August 3-6, 2015.

From Counting to Pascal: A Journey through Number Theory, Geometry, and Calculus, NYS Master Teachers Program-Southern Tier, Vestal Middle School, March 9, 2015.

Geometry in the CCSSM, with T. Moore, Ithaca College, August 22, 2014.

Introduction to GeoGebra, Ithaca College, June 2, 2014.

From Triangles to Circles and Back: Exploring Connections among Common Core Standards, Cornell University, May 3, 2014.

Teaching Mathematics with GeoGebra, with D. Novak, Ithaca College, October 18, 2012.

Probability and Statistics: Changes for Middle School via CCSSM, Yonkers School District, June 26-28, 2012.

Changes Driven by CCSSM, with E. Robinson & J. Maceli, Ithaca College, January 19, 2012.

Internal Grants

Ithaca Fund Travel Grant, funds to support student travel to research conference: 2004, 2005, 2006, 2007, 2009, 2011, 2013, 2014.

Ithaca College Center for Faculty Research and Development Grants: 2002, 2003, 2004, 2006, 2010, 2011.

TEAM Program for Yonkers Schools, Project Assistant, Summer 2009.

Dana Research Intern, *Targeting via Newton's Method*, with William Sendewicz (mathematics student), AY 2004-2005.

Dana Research Intern, *Asset Valuation with Incomplete Markets*, with Veselin Vulckov (Accounting student), Summer 2004.

Dana Research Intern, *Geometric Approach to Torsion on Elliptic Curves*, with Eric Heinzman (mathematics student), Summer 2002.

Dana Research Intern, *A Secondary School Curriculum Supplement in Cryptology*, with Jesse Moran (mathematics-teaching student), Summer 2002.

Awards and Distinctions

MAA Seaway Section Distinguished Lecturer, 2018-2019.

Faculty Excellence Award, Ithaca College, May, 2014.

Henry L. Alder Award for Distinguished Teaching, Mathematical Association of America, 2008.
Citation available: <http://www.maa.org/awards/alder.html>

Humanities & Sciences Dean's Merit Award, 2014.

Ithaca College Mathematics Department Merit Award, 2003, 2005, 2007, 2012, 2014.

Faculty/Staff Mentor Award, Office of Multicultural Affairs, April 2005.

John and Emily Clark Distinguished Teaching Award, Outstanding teaching in the Cornell University College of Arts and Sciences, May 2000.

Undergraduate Research Supervision

Asymmetric Fractal Trees: Koch Canopies and Dragon Curves, Emma Anderson '22, Jack Krueger (Concordia '22), Bianca Teves (Haverford '23), IC NSF-REU in Dynamical Systems, Summer 2021; accepted to 2022 AMS Joint Meetings.

Self-contacting Multi-branch Fractal Trees, Alexandra Dyszewski '22, H&S Summer Scholar, 2020.

Pruning of Hilbert's Space-filling Tree, Connor Robinson '20, H&S Summer Scholar, 2019.

Extension of Kaprekar's Algorithm to Arbitrary Bases, Molly Noel '19 and Noelle Sullivan '19, presented at the Seaway Section Meeting of the Mathematical Association of America, SUNY Brockport, April 14, 2018.

Inequivalent Nets of Polyhedra, Toryn Avery '17, presented at the Seaway Section Meeting of the Mathematical Association of America, SUNY Geneseo, April 16, 2016.

Lines and Ellipses in Taxicab Geometry, Saul Almanzar '17, presented at the Seaway Section Meeting of the Mathematical Association of America, SUNY Geneseo, April 16, 2016.

Odd-sided Magic Polygons, Justin Mader '17, presented at the Seaway Section Meeting of the Mathematical Association of America, SUNY Geneseo, April 16, 2016.

Even-sided Magic Polygons, Charity Willett '16, presented at the Seaway Section Meeting of the Mathematical Association of America, SUNY Geneseo, April 16, 2016.

Kaprekar's Constant, Toryn Avery '17 and Erin Nannen '17, presented at the Seaway Section Meeting of the Mathematical Association of America, Colgate University, April 15, 2015.

In an Ocean of Ashes: Order and Chaos in Math and Literature, Katharine Ahrens '15, presented at the Seaway Section Meeting of the Mathematical Association of America, Colgate University, April 15, 2015.

Orbits of Generalized Fibonacci Sequences with Complex Coefficients, Katharine Ahrens '15, presented at the Seaway Section Meeting of the Mathematical Association of America, SUNY Buffalo, April 26, 2014.

Refining the Model: Imposing Boundaries on Fractals, Abigail Lippitt '13, presented at 20th Hudson River Undergraduate Mathematics Conference, Williams College, April 2013.

Properties of M-bonacci Sequences, Angela Kramer '13 and Katie Ahrens '15, presented at 20th Hudson River Undergraduate Mathematics Conference, Williams College, April 2013.

Mean-Median Sequences, Luke Tonjes '12, presented at 25th annual NCUR conference, Ithaca College, April 2011 and Hudson River Undergraduate Mathematics Conference, Skidmore College, April 2011.

Generalizing Three-Dimensional Pursuit Curves, Scott Constable '12, presented at Hudson River Undergraduate Mathematics Conference, Skidmore College, April 2011.

Pruning IFS in the Sierpinski Triangle, Cameron Schieble '11 and Simone McCarron '12, presented at Hudson River Undergraduate Mathematics Conference, Skidmore College, April 2011.

Square and Rectangular Taxicab Geometry, Mary Curran '11, presented at Hudson River Undergraduate Mathematics Conference, Skidmore College, April 2011.

Identities for Generalized Fibonacci Sequences, Christine Angevine '11 and Gregory Donadio '10, presented at Hudson River Undergraduate Mathematics Conference, SUNY Oswego, April 2010.

Space-filling Fractals, Erin Smurkowski '11 and Evelyn Stamey '11, presented at Hudson River Undergraduate Mathematics Conference, SUNY Oswego, April 2010.

Self-contact in Pruned Fractal Trees, Megan Weintraut '11, presented at NCUR Conference, University of Montana, April 2010.

Space-filling Tree Curves, Hannah Siebold '10, presented at NCUR Conference, University of Wisconsin, LaCrosse, April 2009.

Self-contact in planar asymmetric trees, Melissa Wasson, Summer REU 2007, published in *Pi Mu Epsilon*, March 2008.

Newton's Method Applied to Quartic Polynomials, Laura Mansfield '08, presented at the Nebraska Conference for Undergraduate Women in Mathematics, University of Nebraska, Lincoln, February 2008.

What's the Difference? Part I, Caitlin Owens '08 and Alana DePoint '09, presented at Hudson River Undergraduate Mathematics Conference, Siena College, April 2007.

What's the Difference? Part II, Keri Sheridan '08 and Zach Simmons '07, presented at Hudson River Undergraduate Mathematics Conference, Siena College, April 2007.

Pursuit Curves, Kayleigh Rose '07, presented at Hudson River Undergraduate Mathematics Conference, Siena College, April 2007.

Self-contact in Fractal Trees with Two Scaling Ratios, Walter Hannah '06 and Jason Flory '05, presented at the Hudson River Undergraduate Mathematics Conference, Williams College, April 2005.

Self-contact in Fractal Trees with Two Branching Angles, Robert Mold '06 and Michael Refici '06, presented at the Hudson River Undergraduate Mathematics Conference, Williams College, April 2005.

Dynamics of the Exponential Sine Family, Jonathan Mack '06, presented at the Hudson River Undergraduate Mathematics Conference, Williams College, April 2005.

Analysis of 3-dimensional Fractal Tree Canopies, Peter Maceli (Cornell University), REU Grant 0353687, Ithaca College, Summer 2004. Prize winning poster at AMS/MAA Joint Mathematics Meeting, Atlanta, GA, January 2005.

Structure of Path Lengths in Asymmetric Fractal Trees, Chloe Epstein '05, presented at Nebraska Conference for Undergraduate Women in Mathematics, Lincoln, NE, February 2005.

Configuration of Two Subway Lines to Minimize Walking Distance, Donny Tang '05, Ithaca College, 2002-2003. Presented at Hudson River Undergraduate Mathematics Conference, Mt. Holyoke College, April 2004.

Generalized Fibonacci Identities, Lindsay Monk '04 and Donny Tang '05, Ithaca College, 2002-2003. Presented at Hudson River Undergraduate Mathematics Conference, Union College, April 2003.

Intersection of Parametrized Fibonacci Sequences, Matt Halstead '04 and Joe Goodenbery '03, Ithaca College, 2002-2003. Presented at Hudson River Undergraduate Mathematics Conference, Union College, April 2003.

Geometric Approach to Torsion on Elliptic Curves, Eric Heinzman '02, presented at Hudson River Undergraduate Mathematics Conference, Hamilton College, April 2002.

Asymmetric Binary Branching Fractal Trees, A. O'Hanlon '01 and P. Howard '01, presented at Nebraska Conference for Undergraduate Women in Mathematics, Lincoln, NE, February 2001.

Senior Capstone Project Supervision

Emmy Noether's Theorem in Physics, Antara Sen, 2021-2022.

Pythagorean Proofs, Sainabou Jallow, 2021-2022.

Game Theory, Molly Noel, 2019-2020.

Taxicab Optimization, Keigan Case, 2018-2019.

Modern Cryptology, Daniel Akimchuk, 2018-2019.

Historical Perspective on Cryptology, Brendan King, 2018-2019.

Mathematics of Special Relativity, Samantha Todres, 2018-2019.

Topology of Space, Rachael Ruggiero, 2017-2018.

Fractal Geometry, Melissa McGahan, 2017-2018.

Mathematical Symmetry in the Literature of Poe, Erin Nannen, 2016-2017.

Complex Dynamical Systems, Toryn Avery, 2016-2017.

Prime Number Theorem, Andrew Erskine, 2015-2016.

Space-filling Curves, Linda Crandall, 2015-2016.

Order and Chaos in Math and Literature, Katie Ahrens, 2014-2015.

High School Mathematics from the College Perspective, Hannah Oppenheim, 2014-2015.

Mathematics of Tensors, Michael Griffith, 2013-2014.

Mathematical Billiards, Emily Miller, 2013-2014.

What are Numbers?, Angela Kramer, 2012-2013.

Symmetry and Similarity Across Mathematics, Marc Roberts, 2012-2013.

Analysis with Quaternions, Stephen Gorgone, 2012-2013.

Elliptic Curves, Simone McCarron, 2011-2012.

Conformal Mappings, Justin Wolczynski, 2011-2012.

One-way Functions: The Making and Breaking of Ciphers, Scott Constable, 2011-2012.

Honors Thesis Supervision

Chemical Structure and Mathematics, Sainabou Jallow '22, 2021-2022.

Cryptography & Chaos Theory, Savanna Scott '21, 2020-2021.

Lesson Planning with Cryptography, Kellie Wainwright '21, 2020-2021.

Pruned Fractal Trees, Connor Robinson '20, 2019-2020.

Cryptography & Magic Squares, Molly Noel '20, 2019-2020.

Pruned Fractal Trees, Toryn Avery '17, 2016-2017.

Even-sided Magic Polygons, Charity Willett '16, 2016.

Dynamical Plane Structure in the Parameter Plane of Cosine-Root Family, Maksim Sipos '08, 2006-2007.

Internal Rays for the Mandelbrot Set, Walter Hannah '06, 2005-2006. Presented at Hudson River Undergraduate Mathematics Conference, Mt. Holyoke College, April 2004. Presented at Hudson River Undergraduate Mathematics Conference, Westfield State College, April 2006.

Dynamics of the Cosine-root Family, Matt Halstead '04, 2003-2004. Presented at Hudson River Undergraduate Mathematics Conference, Mt. Holyoke College, April 2004.

Minimization of Walking Distance via Subway Metric, Carly O'Brien '03, 2002-2003. Presented at Hudson River Undergraduate Mathematics Conference, Union College, April 2003.

Courses Taught

HNRS 23017 - World of Numbers	MATH 26100 - Linear Algebra II
ICIC 10000 - Integration	MATH 27000 - Mathematical Reasoning with Discrete Mathematics
ICSM 10500 - History of Secrets	MATH 29100 - Sophomore Seminar
ICSM 10500 - Puzzles & Mysteries	MATH 30300 - Abstract Algebra
IISP 13000 - STEM Success Seminar	MATH 30500 - Introduction to Analysis
MATH 10400 - Finite Mathematics with Calculus	MATH 32000 - Linking College and High School Mathematics
MATH 10500 - Math for Decision-making	MATH 39700 - Junior Seminar
MATH 10700 - Fundamentals of Applied Calculus	MATH 39800 - Mathematical Explorations
MATH 10800 - Applied Calculus	MATH 39810 - Research Experience in Mathematics
MATH 11100 - Calculus I	MATH 40100 - Complex Analysis
MATH 11200 - Calculus II	MATH 48000 - Connections in Advanced Mathematics
MATH 17600 - Problem Solving with Technology	MATH 49300 - Honors in mathematics
MATH 18500 - Mathematical Experimentation	MATH 49800 - Capstone in Mathematics I
MATH 19000 - Freshman Enriched Mathematics	MATH 49900 - Capstone in Mathematics II
MATH 19100 - World of Mathematics	MATH 50100 - Complex Analysis
MATH 21100 - Calculus III	MATH 56000 - History of Mathematics
MATH 21200 - Calculus IV	
MATH 21400 - Differential Equations	
MATH 25000 - Problem-solving Seminar	

Service to the College

- All-College Tenure and Promotion Committee, 2009-2010, 2011-2014, 2019-2022.
- Search Committee for Dean of School of Business, member, 2021-2022.
- ICC Revision Task Force, 2019-2020.
- Integrative Core Curriculum Quantitative Literacy Designation Sub-committee, 2013-2017.
- Integrative Core Curriculum Assessment Rubric Committee, 2012-2014 (co-chair).
- Ithaca Seminar Steering Committee, 2011-2014.
- Quantitative Literacy Development Committee, 2012-2013 (including summer 2012).
- Delivered Quantitative Literacy Workshops for Ithaca College faculty, Fall 2012.
- 25th National Conference on Undergraduate Research (NCUR), conference held at Ithaca College, March 31- April 2, 2011.
 - Oral Session Committee, chair 2010-2011
 - Abstract reviewer
 - Organizing committee
- Move-in Crew (help move first year students into dorms.) August 2011, 2012, 2013.
- Ad-Hoc Faculty Evaluation Committee (review tenure and promotion procedures), 2010-2012.
- Faculty Council, Ithaca College, 2002-2006, 2007-2009.
- HEOP Hiring Committee, Summer 2007.
- Faculty Council, Executive Committee, Ithaca College, 2005-2006.
- HOMER Steering Committee, new student information system, Ithaca College, 2005-2006.
- Academic Achievement and Advising Committee, Ithaca College, 2002-2005.
- Leadership Scholarship Committee, Ithaca College, 2001-2009.
- Admissions Faculty Speaker, Open House, October 2002, November 2003, October 2005.

Service to the School of Humanities & Sciences

- Psychology promotion to full case, outside observer, Fall 2019.
- H&S Curriculum Committee, 2006-2008, 2010-2016, 2017-2019 (co-chair 2010-13 & 2014-16, chair 2013-14 & 2017-2019).
- Computer Science promotion to full committee, outside full professor member, Fall 2016.
- H&S Experiential Learning Committee, Undergraduate Research Task Force, 2010-2011.
- Various H&S admissions events. Yearly.
- H&S General Education sub-committee, 2007-2008 (chair).
- H&S Liberal Arts (ad-hoc) Committee, 2007-2008.
- Summer Orientation Advisor, 2005, 2006, 2007.

Service to the Department of Mathematics

- Department Chair, 2015-2018 & 2018-2021.
- Search committee chair for two tenure-eligible positions, 2019-2020.
- Search Committee for one tenure-eligible position, 2013-2014.
- Search Committee for two tenure-eligible positions, 2012-2013.
- Personnel Committee, 2010-2014.
- Quantitative Literacy committee, 2012-2014.
- Math Exploration Days, HS Outreach, 2004-2019.
- Departmental webmaster, 2004-2019.
- Curriculum Committee, Mathematics, 2002-2003, 2005-2006, 2007-2008 (chair), 2009-2010 (chair), 2021-2022 (chair).
- Search Committee for tenure-eligible position in mathematics education, 2004-2005.
- Masters of Arts in Teaching Committee, 2004-2005.
- Committee on the Major, chair, 2002-2003.
- Faculty advisor, Math Club/Pi Mu Epsilon, 2001-2006.
- Library Liaison, Mathematics, 2001-2007.

Service to the Mathematics Community

- Mathematical Association of America, Seaway Section
 - Student Program Committee, 2010-2018 (chair 2012-2018)
 - Extended Executive Committee, 2012-2016
- Consultant
 - North Dakota EPSCoR Doctoral Dissertation Assistantship Program, external reviewer of proposals, summer 2014.
 - NYS Master Teacher Program, Candidate Evaluator, 2014-2018.
 - Rewarding Achievement (REACH-NYC) program, AP Calculus consultant, 2008-2012.
- Referee and Reviewer
 - Reviewer for the AMS Mathematical Reviews
 - Referee for Missouri Journal of Mathematical Sciences, International Journal of Mathematics Education in Science & Technology, Turkish Journal of Mathematics, and PRIMUS
- External Program Reviewer
 - Houghton College Mathematics Department, November 2006.

Service to the Community

- *What Can I do with a Degree in Mathematical Sciences?* Access to College Education (ACE) Regional Institute, Cortland High School, March 25, 2014.
- *Fractals! Fractals! and More Fractals!*, workshop with Newfield Middle School, Grade 6. May 23, 2013.
- *The Game of Life*, workshop with The Family Math Club, Downtown Ithaca, March 23, 2013.
- Ithaca College Math Exploration Day, a day of mathematics for area high school students, Ithaca College Math Department, 2005-2014.
- Cornell University, College of Engineering, PhD Employment Panel, Panelist, September 2008 and October 2009.
- Ithaca College Math Camp, organized events with education students on cryptology and pursuit curves, August 2007.
- Who Wants to Be a Mathematician?, game show centered on mathematics, created and host (with Dani Novak) in campus center, Ithaca College, October 2005.
- Ithaca High School Career Day, invited guest speaker on job opportunities related to mathematics, April 2004.
- *History of Secrets: Introduction to Cryptology*, introductory cryptology interactive presentation, through the Ithaca College Partnership in Teaching program.
 - Alternative Community School sixth grade math class, Teaching Partnership, December 2005.
 - FOCUS program, full day of presentations in enrichment program through TST BOCES, DeWitt Middle School, May 2004 & May 2005.
 - Candor High School Math Students (12th grade), December 2004.
 - DeWitt Middle School Students (6th grade), December 2004.
- Newfield Recreation Baseball coach, 2007-2012.

Professional Memberships

American Mathematical Society
Mathematical Association of America
Pi Mu Epsilon

References

Available upon request.