Michael J. Bradley

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Education

- Ph.D. in Mathematics, University of Notre Dame, Notre Dame, IN, 1983
- M.A. in Mathematics, University of Notre Dame, Notre Dame, IN, 1980
- B.A. in Mathematics, Merrimack College, North Andover, MA, 1978
- Graduate computer science courses (4), University of Massachusetts-Lowell, 1984 to 1986
- Graduate data science course (1), Merrimack College, 2019

Faculty Appointments at Merrimack College

Full Professor, 2001 to present Associate Professor, 1988 to 2001 Assistant Professor, 1983 to 1988

Teaching

Department of Data Science and Analytics, Merrimack College, North Andover, MA,
 2020 to present

Department Chair, 2020-present

Department of Mathematics, Merrimack College, North Andover, MA, 1983 to 2019
 Department Co-chair, 2015-2019

Department Chair, 1989-1993, 2006-2009

Taught 30 undergraduate courses in mathematics and computer science, including basic statistics, basic statistics with fantasy football, calculus-based probability and statistics I and II, calculus I-II-III, differential equations, linear algebra, abstract algebra, real analysis, discrete mathematics, combinatorics and graph theory, game theory, number theory, computer programming, data structures, analysis of algorithms, and several directed studies.

- Department of Mathematics, University of Massachusetts-Lowell, Lowell, MA, adjunct lecturer for graduate math course in algebraic structures and undergraduate course in calculus, 1986, 1998
- Northern Essex Community College, Haverhill, MA, adjunct lecturer for undergraduate courses in algebra, 1999 to 2000, and 2010 to 2014
- Accept the Challenge (ATC), math instructor for five-week summer program for bilingual high school students from Lawrence, 1988 to 2011
- Resources to Accelerate the Integration of Science Education (RAISE), math instructor for one-week summer program for elementary school students and teachers from Lawrence, 1992 to 2002

 Summer Program for English Language Learners (SPELL), math instructor for sixweek summer program for bilingual junior-high school students from Lawrence, 2001, 2002

Publications

Books

- Pioneers in Mathematics: The Birth of Mathematics: Ancient Times to 1300, Chelsea House Publishing: New York, 2006
- Pioneers in Mathematics: The Age of Genius 1300-1800, Chelsea House Publishing: New York, 2006
- Pioneers in Mathematics: The Foundations of Mathematics 1800-1900, Chelsea House Publishing: New York, 2006
- <u>Pioneers in Mathematics: Modern Mathematics 1900-1950</u>, Chelsea House
 <u>Publishing: New York, 2006</u>
- Pioneers in Mathematics: Mathematics Frontiers 1950 to the Present, Chelsea House Publishing: New York, 2006

[Pioneers in Mathematics book set was translated and published in Chinese by Shanghai Scientific Publishers, 2007; in Korean by Ilchulbong Publishers, 2008; and in Japanese by Seidosha Publishers, 2009, listed on Mathematical Association of America's Basic Library List, 2010-2018.]

- Elementary Functions for Calculus, with Frank Eccles, Fourth Edition, 2002
- An Introduction to Discrete Mathematics, Third Edition, McGraw-Hill, Dubuque, IA, 2000
- <u>Calculus for Business</u>, third printing with corrections, McGraw-Hill, Dubuque, IA,
 2000
- Testbank to Accompany Calculus With Applications for Business and the Social and Natural Sciences, West Publishing Co., St. Paul, MN, 1993
- Testbank to Accompany Applied Mathematics for Business and the Social and Natural Sciences, West Publishing Co., St. Paul, MN, 1992
- Testbank to Accompany Applied Finite Mathematics for Business and the Social and Natural Sciences, West Publishing Co., St. Paul, MN, 1992
- Testbank to Accompany Applied Calculus for Business and the Social and Natural Sciences, West Publishing Co., St. Paul, MN, 1992

Refereed Articles in Academic Journals

- "Automorphism Groups of Plane Curves", with Harry D'Souza, *Communications in Algebra*, vol. 32, no. 8 (October, 2004), pp. 2885-2894
- "Additivity and Homogeneity", with Michael St. Vincent and David Finn, *The College Mathematics Journal*, vol. 30, no. 2 (March, 1999), pp. 133-135
- "Analyzing Multi-Phase Searching Algorithms", *SIGCSE Bulletin*, vol. 28, no. 3 (September, 1996), pp. 5-8
- "Building Home Plate: Field of Dreams or Reality?", Mathematics Magazine, 69 (February, 1996), pp. 44-45 [Article based on this paper titled "Pythagoras Plays Ball" by Ivars Peterson appeared in his internet column Math Trek March 25, 1996 and July 12, 2004 and as chapter 5 in his book Mathematical Treks: From Surreal Numbers to Magic Circles, The Mathematical Association of America, Washington, DC, 2001.]

 "On the Orders of Automorphism Groups of Complex Projective Hypersurfaces", with Harry D'Souza, Geometry of Complex Projective Varieties, Mediterranean Press, Rende, Italy, 1993

Presentations

National Conferences, Regional Conferences, and Guest Lectures

- "Four Fours Problem", led workshop for faculty at Arlington Middle School, Lawrence, MA, December 4, 2019
- "Ten Math Problems Inspired by Srinivasa Iyengar Ramanujan", guest lecture at Gordon College Math Forum, Wenham, MA, November 15, 2018
- "Automorphism and Collineation Groups of Good Curves", presented by co-author Harry D'Souza, Summer Institute in Algebraic Geometry, July 25 – August 12, 2005, University of Washington, Seattle, WA
- "Bites of Pi", Fall Meeting of the Northeastern Section of the MAA, November 19-20, 1999, Bradford College, Haverhill, MA
- "Linkages, Applications and Challenges in Teaching Discrete Mathematics", presented by co-author Thomas Hull, Joint AMS/MAA Mathematics Meetings, January 14, 1999, San Antonio, TX
- "A Modular Approach to Teaching Mathematics", Spring Meeting of the Northeastern Section of the MAA, June 5-6, 1992, Merrimack College
- "A Modular Approach to Teaching Mathematics", Annual Meeting of New England Mathematical Association of Two Year Colleges (NEMATYC), March 14, 1992, Middlesex Community College, Lowell, MA

Workshop Presented

• "The People behind the Formulas: Using the Life Stories of Famous Mathematicians to Enhance the Teaching of Mathematics", Graduate Institute for Teachers, November 16, 2007, Merrimack College

Honors and Awards

- Edward G. Roddy Outstanding Teacher Award, Merrimack College, 2001
- Veracundus Award (for service to the college), Merrimack College, 2011
- Pi Mu Epsilon National Mathematics Honor Society, 2016 to present
- Albert Nelson Marquis Lifetime Achievement Award, 2017
- Marquis Who's Who in the World, 2007
- Marquis Who's Who in America, 2006
- American Men and Women of Science, 1997
- Who's Who Among America's Teachers, 1996, 2007
- Alpha Sigma Lambda ($A\Sigma\Lambda$) Continuing Education Honor Society inducted as honorary faculty member, 1988

Professional Memberships

- Mathematical Association of America (MAA), 1985 to present
- History of Mathematics Special Interest Group of the Mathematical Association of America (HOM-SIGMAA), 2002 to present
- Mathematics and Sports Special Interest Group of the Mathematical Association of America (Sports SIGMAA), 2019 to present

Service to Merrimack College Community (since 2000)

Department of Data Science and Analytics – chair (2020-)

Department of Mathematics – co-chair (2015-19), chair (2006-09), chair of five-year self-study/program evaluation (2014), faculty advisor to Math Team (2006-19), chair of Kearns Award Selection committee (2008-19), search committee for full-time faculty hires (3 times), organized department's 50th year reunion (2009), area committees for departmental tenure candidates (5 times), open houses/accepted student receptions (27 times)

School of Science and Engineering – BS in Data Science committee (2017-19), Steering Committee for Masters Degree Programs in Data Science and Business Analytics (2017-19), Science and Engineering Visioning Committee (2016-17), Faculty/Staff Ambassador for Campaign for Good (2017), Best Practices in Teaching and Learning Committee (2010-12), NSF Grant Proposal Committee for STEP-STEM grants (2009, 2010), Dean Search Committee (2009), Strategic Planning Committee (2008-09), STEM committee (2004-06), Murray Fellowship Selection Committee (2020), EIT/FE review session for civil engineering majors (4 times), area committees for tenure and promotion candidates (14 times)

College Committees – Appointment, Rank and Tenure committee (7 times), Appeals committee (4 times), Honorary Degrees Committee (2016-17), Faculty Advisory Committee on Continuing Education (2011-12), Quantitative Reasoning Committee (2010-12), Presidential Search Committee (2008, 2010), Faculty Advisory Board for Stevens Learning Center (2007-10), College Wide Strategic Planning Committee (2007), AAUP Chapter officer (2002-07), Enrollment Management Strategic Planning Committee (2002-05), Diversity Education Center Advisory Board (2004-05), Faculty Advisory Board of the Center for Augustinian Study and Legacy (2000-01), area committees for tenure and promotion candidates (8 times)

Other Campus Service – advisor/mentor/advocate for tenure-track and non-tenure-track faculty (17 times), guest lectures/presentations on campus (32 times), panelist for AAUP Tenure Forum (4 times), liturgical choir for special events (2014-19), Relay for Life (2013-19), faculty-student intramural soccer team (2010-15), Merrimack College Federal Credit Union Board of Directors (2006-13)