

Breeann Marie Flesch

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Education

- **University of Colorado Denver** Denver, CO
Ph.D. Applied Mathematics 2011
 - Advisor: Richard Lundgren
 - Dissertation: On Interval Representations and Symmetries of Graphs
- **University of Colorado Denver** Denver, CO
M.S. Applied Mathematics 2010
 - Advisor: Richard Lundgren
 - Focus: Discrete Mathematics
- **Montana State University Billings** Billings, MT
M.Ed. Interdisciplinary Studies 2003
 - Advisor: Dixie Metheny
 - Focus: Mathematics Education
- **Rocky Mountain College** Billings, MT
B.S. in Mathematics and Computer Science 2001
 - Graduated with Summa Cum Laude honors
- **Budapest University of Technology** Budapest, Hungary
Semester Abroad 2001
 - Studied mathematics, including Analysis and Combinatorics

Awards, Grants & Honors

Inducted into Pi Mu Epsilon, National Mathematics Honor Society 2012
National Science Foundation GK-12 Fellowship 2009 - 2011
Lynn Bateman Outstanding Graduate Teaching Assistant Award 2009
Teaching Assistant, University of Colorado Denver 2007-2009
State of Colorado Professional Teacher License: Secondary Mathematics 2003-present
Technology Innovation Challenge Award Grant Assistant 2002
Graduate Assistant, Montana State University Billings 2001-2002
Dean's Cup Award, Rocky Mountain College 2001
National Science Foundation Summer Fellowship 2000

Teaching Experience

- Western Oregon University, Monmouth, OR 2011-present

Assistant Professor

Courses Taught

- Discrete Mathematics
- Elementary Problem Solving
- Discrete Mathematics for Elementary Teachers
- Foundations of Elementary Mathematics II
- Introduction to Geometry for Elementary Teachers

- University of Colorado Denver, Denver, CO 2007-2009

Teaching Assistant

Courses Taught

- Mathematics for Liberal Arts
- Mathematics for Liberal Arts Online
- College Algebra for Business Majors
- Guest Lecturer: Graduate Applied Linear Algebra
- Guest Lecturer: Graph Theory
- Research Experience for Middle School Teachers

- Peak to Peak Charter School, Lafayette, CO 2003-2007

Mathematics and Computer Science Teacher

Courses Taught

- Calculus I
- Precalculus
- Discrete Mathematics
- Algebra I
- Introduction to Computer Science
- Introduction to Technology

- Peak to Peak Charter School, Lafayette, CO 2003-2007

Curriculum and Teacher Development Coordinator

Training and Development Activities

- Research, design, and implement standards-based curriculum for 5 new classes
- Mentor for Alternative Teacher Licensure program
- Teach professional workshops in Peer-Coaching Program and Web Page Creation

- Whitefish High School, Whitefish, MT 2003

Mathematics Teacher

Courses Taught

- Algebra II
- Geometry

Institutional Service

Faculty Senate Division Senator, Western Oregon University 2012-present
Maurice Undergraduate Initiative Review Committee, Western Oregon University . 2011-present
Sonia Kovalevsky Mathematics Day Co-Organizer, Western Oregon University . . . 2011-present
Mathematics Education Committee, Western Oregon University 2011-present
Graduate Student Committee, University of Colorado Denver 2009-2010
Hiring and Organizational Development Team Member, Peak to Peak Charter School . 2004-2007
Curriculum Mapping Committee Member, Peak to Peak Charter School 2004-2007
Faculty Advisor for Student Council, Peak to Peak Charter School 2003-2006
Co-President of the Graduate Student Association, Montana State University Billings . 2002-2003
NCATE Accreditation Committee Member, Montana State University Billings 2001-2002

Professional Service and Membership

- “Circular consecutive choosability of k -choosable graphs,” American Mathematical Society Reviewer, April 2012.
- “Characterizing directed path graphs by forbidden asteroids,” American Mathematical Society Reviewer, January 2012.
- American Mathematical Society, Member, 2009-present
- Society for Industrial and Applied Mathematics, Member, 2008-2011

Publications

- Brown, David; Flesch, Breeann; and Lundgren, J. Richard. A characterization of 2-tree probe interval graphs. submitted to *Discrete Applied Mathematics* on March 19, 2012.
- Ferrara, Michael; Flesch, Breeann; and Gethner, Ellen. List-distinguishing colorings of graphs. *The Electronic Journal of Combinatorics* 18 (2011), P161, 17pp.
- Flesch, Breeann; and Tennenhouse, Craig. Edge maximal non-interval graphs. *Journal of Combinatorial Mathematics and Combinatorial Computing* 77 (2011), 33-44.
- Flesch, Breeann; and Lundgren, J. Richard. A characterization of k -trees that are interval p -graphs. *The Australasian Journal of Combinatorics* 49 (2011), 227-237.
- Das Gupta, Shilpa; Flesch, Breeann; and Lundgren, J. Richard. Bigraph impropriety. *Congressus Numerantium* 206 (2010), 115-129.

Presentations

- *A characterization of probe interval 2-trees*. The Mathematical Association of America Pacific Northwest Section Meeting - Portland, OR, April 2012.
- *List-Distinguishing colorings of graphs*. Forty-third annual Southeastern International Conference on Combinatorics, Graph Theory, and Computing – Boca Raton, FL, March 2012.
- *List-Distinguishing colorings of graphs*. Wuhan International Graph Theory Workshop – Wuhan, Hubei, China, June 2011 (invited).
- *A characterization of probe interval 2-trees*. Forty-second annual Southeastern International Conference on Combinatorics, Graph Theory, and Computing – Boca Raton, FL, March 2011.
- Panel Presentation: *Interdisciplinary and Research Lessons*. National Science Foundation GK-12 Rocky Mountain Regional Conference – Denver, CO, October 2010.
- *List-Distinguishing colorings of graphs*. 1060th American Mathematical Society Sectional Meeting – Newark, NJ, May 2010 (invited).
- *Interval p -graphs*. The Mathematical Association of America, Rocky Mountain Section Meeting – Fort Collins, CO, April 2010.
- *Interval p -graphs*. Forty-first Southeastern International Conference on Combinatorics, Graph Theory, and Computing – Boca Raton, FL, March 2010.
- Poster Presentation: *GK-12 Transforming Experiences*. National Science Foundation GK-12 National Conference – Washington DC, March 2010.