

## MICHAEL BRYCE WARD

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### *Education*

Ph.D., University of Utah, 1979  
B.S., Utah State University, 1974

### *Employment*

Western Oregon University, Professor, 1999-present  
Binghamton University, Visiting Professor, 2004-2005  
Western Oregon University, Associate Professor, 1997-1999  
Bucknell University, Professor, 1997-1999  
Eastern Kentucky University, Exchange Associate Professor, 1990  
Bucknell University, Associate Professor, 1985 - 1997  
Bucknell University, Assistant Professor, 1981 - 1985  
Bucknell University, Visiting Assistant Professor, 1979 - 1981  
University of Utah, Teaching Fellow, 1974 - 1979

### *Research Interests*

Finite Group Theory

### *Refereed Publications in Group Theory*

On Minimal Non-p-closed Groups and Related properties, with L. C. Kappe, G. Mendoza, and M. Mazur, to appear in *Publicationes Mathematicae Debrecen* (2011).

Cosets and Cayley-Sudoku Tables, with Jennifer Carmichael and Keith Schloeman, *Mathematics Magazine* 83 (2010), 130-139.

On a Conjecture of Alvis, with Michael J. J. Barry, *Journal of Algebra* 294 (2005), 136-155.

On Self-normality and Abnormality in the Alternating Groups, with Ben Brewster and Qin Hai H. Zhang, *Archiv der Mathematik* 83 (2004), 385-393.

Finite groups with exactly two conjugacy classes of the same order, with Christopher M. Boner, *Rocky Mountain Journal of Mathematics*. 31(2001), 401-416.

Two-Transitive Actions on Conjugacy Classes, with Michael J. J. Barry, *Bulletin of the Australian Mathematical Society* 59 (1999), 409-420.

Simple groups contain minimal simple groups, with Michael J. J. Barry, *Publicacions Matemàtiques* 41 (1997), 411-415.

Sylow Fractals, with Ben Brewster, *Mathematics Magazine* 68 (1995), 372-376.

Finite groups acting 2-transitively on Sylow subgroups, with Ben Brewster, *Bulletin of the Australian Mathematical Society* 52 (1995), 117-136.

Products of Sylow Groups, with Michael J. J. Barry, *Archiv der Mathematik* 63 (1994), 289-290.

Finite groups having chain difference one, with B. Brewster and I. Zimmermann, *Journal of Algebra* 160 (1993), 179-191.

Finite solvable groups acting 2-transitively on Sylow subgroups, with Ben Brewster, *Group Theory--Proceedings of the Biennial Ohio State-Denison Conference*, 1993, World Scientific, Singapore, New Jersey, London, Hong Kong, 322-325.

Finite groups in which no two distinct conjugacy classes have the same order, *Archiv der Mathematik* 54 (1990), 111-116.

On the solvability of finite groups, with Z. Arad, *Archiv der Mathematik* 42 (1984), 489-491.

Transfer and normal Fitting classes, with J. Beidleman, *Archiv der Mathematik* 42(1984), 200-207.

New criteria for the solvability of finite groups, with Z. Arad, *Journal of Algebra* 77(1982), 234-246.

Products of supersolvable and nilpotent finite groups, with D. Finkel, *Archiv der Mathematik* 36 (1981), 385-393.

### ***Refereed Publications in Mathematics Education***

The Role of Mathematical Definitions in Mathematics and Mathematics Education, with Barbara S. Edwards, *Making the Connection*, M. Carlson and C. Rassmussen, Eds., Mathematical Association of America, 2008.

New Practices in Teaching Mathematical Definition, with Barbara S. Edwards, *Preparing Future Science and Mathematics Teachers: Faculty Write About CETP Innovations on Campuses Today*, Diane Smith and Elisabeth Swanson, Eds., 2005, Montana State University, 23-25.

Surprises from Mathematics Education Studies: Student (Mis)use of Mathematical Definitions, with Barbara S. Edwards, *The American Mathematical Monthly*, 111 (2004), 411-424..

***Erdos Number***            3

***Recent Talks***

Ohio State-Denison Mathematics Conference 2010, 2012  
Zassenhaus Group Theory Conference 2005  
Mathematical Association of America Section Meeting 2004, 2006  
Willamette University Colloquium 2010  
Binghamton University Algebra Seminar 2004  
Portland State University Colloquium 2003  
Joint Mathematics Meetings 2003, 2007, 2008, 2010

***Teaching at WOU***

Lower division: Foundations of Elementary Mathematics I, College Algebra, Trigonometry, Calculus, Introduction to Proof

Upper division: Group Theory, Ring Theory, Geometry, Galois Theory, Number Theory, Linear Algebra I & II, Linear Optimization, Mathematics of Computer Graphics, History of Mathematics, Senior Project (capstone course), Topology, Abstract Algebra for Middle School Teachers

***Service***

Committees at Western Oregon University: Joint Committee on Faculty Evaluation, Faculty Senate, Faculty Senate Executive Committee, Division Personnel Review Committee, Faculty Development Committee, Student Conduct Committee, Strategic Planning Council, Institutional Review Board, Ad hoc LACC Review Committee.

Co-chair, Department of Mathematics, 2003-2004

Oregon Mathematics Education Council, 2002-2004

Oregon Mathematics Leadership Institute (NSF funded), instructional staff, 2005

Outside reader/examiner: Gabriella Mendoza, Ph.D. Thesis, Binghamton University 2006, Tom Kimber, Ph.D. Thesis, Binghamton University, 1997; Qin Hai Zhang, Ph.D. Thesis, Binghamton University, 1998; John Best, Ph.D. Thesis, Binghamton University, 2001