

Michael M. Dougherty

Department of Mathematics
Southwestern Oklahoma State University
Weatherford, OK 73096

Email: michael.dougherty@swosu.edu
URL: faculty.swosu.edu/michael.dougherty
Home: (580) 774-7939
Work: (580) 774-3057

Personal

- U.S. Citizen, Born October 29, 1967, Rockford, Illinois.

Education

- Ph.D. Mathematics, Purdue University, W. Lafayette, Indiana, August 1995 (Adviser: Daniel Phillips).
- M.S. Mathematics, Purdue University, December 1991.
- B.S. Mathematics, Physics minor, Creighton University, Omaha, Nebraska, May 1989.

Teaching Experience

- Spring 2000–Present: Assistant Professor of Mathematics, Southwestern Oklahoma State University, Tenured 2005.
- Fall 1995–Fall 1999: Assistant Professor of Mathematics, Penn State University, Berks Campus.
- Fall 1989–Summer 1995: Instructor, Teaching and Research Assistant, Purdue University.

Publications and Manuscripts

- Dougherty, Michael, *Calculus for students of mathematics and related disciplines*, textbook in preparation.
- Dougherty, Michael, “A standard for classroom use of symbolic logic,” submitted.
- Dougherty, Michael, “Higher gradient integrability of minimizers for a polyconvex case in two dimensions,” *Siam Journal on Mathematical Analysis*, Volume 28, Number 3, May 1997, pp. 530–538.
- Dougherty, Michael and Phillips, Daniel, “Higher gradient integrability of equilibria for certain rank-one convex integrals,” *Siam Journal on Mathematical Analysis*, Volume 28, Number 2, March 1997, pp. 270–273.

Invited Talks

- “The chain rule is the only general rule,” Oklahoma/Arkansas Mathematical Association of America Section conference, March 28, 2008.
- “A standardized logic notation for everyday classroom use,” Oklahoma/Arkansas Mathematical Association of America Section conference, March 30, 2007.
- “Some calculus reforms: others needed?” Oklahoma/Arkansas Mathematical Association of America Section conference, April 10, 2005.
- “Why the fundamental theorem of calculus is so very obvious,” SWOSU KME (Mathematics Honors Society) Seminar, March 8, 2006.
- “How my math major got me through a physics minor,” SWOSU KME Seminar, November 13, 2002.
- “Mathematical Typesetting with L^AT_EX,” SWOSU KME Seminars, April, 2002 and April, 2001.
- “Some results on higher regularity for minimizers given polyconvex local energies,” Mathematics Seminar, National Chung Cheng University, Taiwan, hosted by Jyh-Wang Wu, June 30, 1997.

- “Regularity of equilibria for polyconvex functionals in the calculus of variations,” Applied Mathematics Seminar, Penn State University, State College, hosted by Maria-Carme T. Calderer, April 4, 1997.
- “Higher gradient integrability of equilibria for functionals with rank-one convex local energies,” American Mathematical Society meeting, Special Session of Partial Differential Equations, April 14, 1996, Courant Institute at New York University.
- “Special Relativity, what every mathematician should know,” Purdue Graduate Student Seminar, Fall 1992.

Awards and Grants

- Penn State Research Development Grant, 1998.
- Purdue Research Foundation research assistantship grant, 1994.
- Purdue Research Fellowship, Fall 1989–Spring 1990.
- Creighton University Honors Program graduate.

Other Experience

- SWOSU Faculty Senate representative, Fall 2002–Spring 2003, Spring 2004–Spring 2006.
- Reviewer for Smith and Roland, *Calculus* (Premier Edition), McGraw Hill, 2000.
- Reviewer for Yang, Daoqi and Massey, J. III, “Hilbert spaces,” *Wiley Encyclopedia of Electrical and Electronics Engineering*, April 1998 (date of review).

Professional References

- Daniel Phillips, Professor of Mathematics, Purdue University, W. Lafayette, IN 47906, phillipsmath.purdue.edu.