

Curriculum Vitae

Dr. Barbara Zubik-Kowal

Address: Department of Mathematics **e-mail:** zubik@math.boisestate.edu
Boise State University **web:** <http://math.boisestate.edu/~zubik/>
Boise, ID 83725, USA **tel.** +1 208 426 - 2802

Position: Professor

Native language: Polish

Other languages: English and Russian

Editorial Board:

Scholarpedia: Numerical Analysis Category, peer-reviewed journal

University Diplomas:

Ph.D., **Poland**, Adam Mickiewicz University, Faculty of Mathematics and Computer Science, 1996. Dissertation: *Functional Differential Inequalities and Applications*.

M.Sc., **Poland**, University of Gdańsk, Institute of Mathematics, 1990. Thesis: *Numerical Methods for Spline Functions Approximation*.

Post-doctoral Fellowship Positions:

- **United Kingdom**, Oct. 1999 - Sep. 2000
University of Strathclyde, Department of Mathematics
- **The Netherlands**, Sep. 1998 - Aug. 1999
Leiden University, Department of Mathematics
- **Belgium**, Feb. 1997 - Jul. 1998
Katholieke Universiteit Leuven, Department of Computer Sciences

Positions in the USA and Poland:

- Professor, Boise State University, Department of Mathematics, 2010 - present
- Associate Professor, Boise State University, Department of Mathematics, 2006 - 2010
- Assistant Professor, Boise State University, Department of Mathematics, 2002 - 2006
- Visiting Assistant Professor, Arizona State University, Department of Mathematics and Statistics, 2001 - 2002
- Assistant Professor, University of Gdańsk, Department of Mathematics, 1996 -1997 & 2000 - 2001

Publications in peer-reviewed journals & 2 proceedings, part I of the list:

- [39] Jorczyk C., Kolev, M., and Zubik-Kowal, B., “*Numerical Experiments For Mammary Adenocarcinoma Cell Progression*”, Integral Methods in Science and Engineering, Computational and Analytic Aspects, Birkhäuser, 2011.
- [38] Kolev, M., and Zubik-Kowal, B., “*Numerical experiments with model equations of cancer invasion of tissue*”, Control and Cybernetics, Vol. 40 (2011) No. 3. article access.
- [37] Kolev, M., and Zubik-Kowal, B., “*Numerical versus experimental data for prostate tumor growth*”, J. Biol. Systems, World Scientific Book Series in Mathematical Biology and Medicine, **19** (2011) pages 33-46, article access.
- [36] Kolev, M., and Zubik-Kowal, B., “*Numerical solutions for a model of tissue invasion and migration of tumour cells*”, *Comput. Math. Methods Med., An Interdisciplinary Journal of Mathematical, Theoretical and Clinical Aspects of Medicine*, 452320 (2011) 16 pp, article access.
- [35] Drucis, K., Kolev, M., Majda, W., and Zubik-Kowal, B., “*Nonlinear modeling with mammographic evidence of carcinoma*”, Elsevier, Nonlinear Analysis: Real World Applications, **11** (2010) pages 4326-4334, article access.
- [34] Jackiewicz Z.; Jorczyk, C.L.; Kolev, M.; Zubik-Kowal, B., Correlation between animal and mathematical models for prostate cancer progression, *Comput. Math. Methods Med., An Interdisciplinary Journal of Mathematical, Theoretical and Clinical Aspects of Medicine*, **10** (2009) pages 241–252, article access.
- [33] Basse, B.; Jackiewicz Z.; Zubik-Kowal, B., Finite-difference and pseudospectral methods for the numerical simulations of *in vitro* human tumor cell population kinetics, *Math. Biosci. Eng.* **6** (2009) pages 561-572, article access.
- [32] Jackiewicz, Z.; Kuang, Y.; Thalhauser, C.; Zubik-Kowal, B., Numerical solution of a model for brain cancer progression after therapy, *Math. Model. Anal.*, **14** (2009) pages 43-56, article access.
- [31] Jackiewicz Z.; Zubik-Kowal, B., Discrete variable methods for delay-differential equations with threshold type delays, *J. Comp. Appl. Math.*, **228** (2009) pages 514-523, article acc
- [30] Zubik-Kowal, B., Delay partial differential equations, *Scholarpedia*, peer-reviewed open-access encyclopedia, (2008) 3(4):2851, article access.
- [29] Hoppensteadt, F. C.; Jackiewicz, Z.; Zubik-Kowal, B., Numerical solution of Volterra integro-differential equations modeling thalamo-cortical systems, *PAMM Wiley Interscience Journal, Proc. Appl. Math. Mech.* **7**, Published Sep. 18 2008.
- [28] Crook, S.; Dur-e-ahmad, M.; Jackiewicz, Z.; Zubik-Kowal, B., A variant of pseudospectral method for activity-dependent dendritic branch model, *J. of Neuroscience Methods*, 165, (2007) no. 2, 306–319. article access.
- [27] Hoppensteadt, F. C.; Jackiewicz, Z.; Zubik-Kowal, B., Numerical Solution of Volterra Integral and Integro-Differential Equations with Rapidly Vanishing Convolution Kernels, *BIT Numerical Mathematics*, **47** (2007), no. 2, 325–350, article access.
- [26] Jackiewicz, Z.; Zubik-Kowal, B., Numerical solutions of thalamo-cortical systems, *Numerical Analysis and Approximation Theory*, (2006) 239–246.
- [25] Zubik-Kowal, B., Solutions for the cell cycle in cell lines derived from human tumors,

Publications in peer-reviewed journals - part II of the list:

Comput. Math. Methods Med., **7**(4) (2006), 215-228, article access.

[24] Jackiewicz, Z.; Zubik-Kowal, B., Spectral collocation and waveform relaxation methods for nonlinear delay partial differential equations, *Appl. Numer. Math.*, **56** (2006), 433-443, article access.

[23] Jackiewicz, Z.; Zubik-Kowal, B., Spectral collocation and waveform relaxation methods with Gengenbauer reconstruction for nonlinear conservation laws, *Comput. Methods Appl. Math.*, **5**(1) (2005), 51-71.

[22] Mead, J.; Zubik-Kowal, B., An iterated pseudospectral method for delay partial differential equations, *Appl. Numer. Math.*, **55** (2005), 227-250.

[21] Davies, P. J.; Duncan, D. B.; Zubik-Kowal, B., The stability of numerical approximations of the time domain current induced on a thin wire and strip antennas, *Appl. Numer. Math.*, **55** (2005), 48-68.

[20] in 't Hout, K. J.; Zubik-Kowal, B., On the stability of Radau IIA collocation methods for delay differential equations, *Math. Comput. Modelling*, **40** (2004), 1297-1308.

[19] Mead, J.; Zubik-Kowal, B., Pseudospectral iterated method for differential equations with delay terms, *Springer-Verlag, Lecture Notes in Computer Science*, LNCS **3039** (2004), 451-458.

[18] Zubik-Kowal, B., Error bounds for spatial discretization and waveform relaxation applied to para-bolic functional-differential equations, *J. Math. Anal. Appl.* **293** (2004), 496-510.

[17] Davies, P. J.; Zubik-Kowal, B., Fourier stability analysis of a numerical method for time domain electromagnetic scattering from a thin wire, *Numer. Algorithms* **35** (2004), 121-130.

[16] Jackiewicz, Z.; Welfert, B. D.; Zubik-Kowal, B., Spectral versus pseudospectral solutions of the wave equation by waveform relaxation methods, *J. Sci. Comput.* **20** (2004), 1-28.

[15] Zubik-Kowal, B., Error estimations for iterated numerical schemes applied to parabolic partial differential equations, *Int. J. Appl. Math.* **14** (2003), 259-268.

[14] Davies, P. J.; Rynne, B. P.; Zubik-Kowal, B., The time domain integral equation for a straight thin wire antenna with the reduced kernel is not well-posed, *IEEE Trans. Ant. Prop.*, **50**(8), (2002), 1165-1166.

[13] Davies, P. J.; Zubik-Kowal, B., Numerical approximation of time-domain electromagnetic scattering, *Numer. Algorithms*, **30** (2002), 25-36.

[12] Zubik-Kowal, B., Stability in the numerical solution of linear parabolic equations with a delay term, *BIT Numerical Mathematics* **41**:1 (2001), 191-206.

[11] Zubik-Kowal, B., Chebyshev pseudospectral method and waveform relaxation for differential and differential-functional parabolic equations, *Appl. Numer. Math.*, **34**(2-3), (2000), 309-328.

[10] Vandewalle, S.; Zubik-Kowal, B., Waveform relaxation for functional-differential equations, *SIAM J. Sci. Comput.*, **21**(1), (1999), 207-226.

[9] Zubik-Kowal, B., The method of lines for parabolic differential-functional equations, *IMA Jour. Num. Anal.*, **17** (1997), 103-123.

[8] Kamont, Z.; Zubik-Kowal, B., Numerical methods for impulsive partial differential equations, *Dynamic Syst. and Appl.*, **7**(1), (1998), 29 - 52.

[7] Zubik-Kowal, B., The method of lines for impulsive functional partial differential equa-

Publications in peer-reviewed journals - part III of the list:

- tions of the first order, *Comm. Appl. Anal.*, **2** (1998), 111-128.
- [6] Kamont, Z.; Turo, J.; Zubik-Kowal, B., Differential and difference inequalities generated by mixed problem for hyperbolic functional differential equations with impulses, *Appl. Math. Comp.*, **80** (1996), 127-154.
- [5] Zubik-Kowal, B., Convergence of the method of lines for parabolic differential-functional equations, *Advances in Difference Equations*, August 7-11, 1995.
- [4] Zubik-Kowal, B., The method of lines for first order partial differential-functional equations, *Stud. Scien. Math. Hung.*, **34** (1998), 413-428.
- [3] Zubik-Kowal, B., Monotone iterative method for Caratheodory solutions of differential-functional equations, *Le Matematiche*, **L**, II (1995), 311-321.
- [2] Zubik-Kowal, B., Convergence of the lines method for first-order partial differential-functional equations, *Numer. Meth. Part. Diff. Eqs*, **10** (1994), 395-409.
- [1] Zubik-Kowal, B., On first order partial differential-functional inequalities, *Math. Balk.*, **6** (1992), 75-82.

Published Reviews:

- MR2798544. <http://www.ams.org/mathscinet-getitem?mr=2798544> Review of Gzyl, Henryk; Velsquez, Yurayh Linear inverse problems. The maximum entropy connection. With 1 CD-ROM (Windows, Macintosh and UNIX). *Series on Advances in Mathematics for Applied Sciences, 83. World Scientific Publishing Co. Pte. Ltd., Hackensack, NJ*, 2011. xxii+326 pp. ISBN: 978-981-4338-77-6; 981-4338-77-X (Reviewer: Barbara Zubik-Kowal).
- MR2773430. <http://www.ams.org/mathscinet-getitem?mr=2773430> Review of Roininen, Lassi; Lehtinen, Markku S.; Lasanen, Sari; Orispää, Mikko; Markkanen, Markku Correlation priors. *Inverse Probl. Imaging* 5 (2011), no. 1, 167184. (Reviewer: Barbara Zubik-Kowal).
- MR2746809. <http://www.ams.org/mathscinet-getitem?mr=2746809> Review of Hyakuna, Ryosuke; Tanaka, Takamasa; Tsutsumi, Masayoshi On the global well-posedness for the linear Schrödinger equations with large initial data of infinite L^2 norm. *Nonlinear Anal.* 74 (2011), no. 4, 13041319. (Reviewer: Barbara Zubik-Kowal).
- MR2763660. <http://www.ams.org/mathscinet-getitem?mr=2763660> Review of Chen, Zhiming; Zheng, Weiyang Convergence of the uniaxial perfectly matched layer method for time-harmonic scattering problems in two-layered media. *SIAM J. Numer. Anal.* 48 (2010), no. 6, 21582185. (Reviewer: Barbara Zubik-Kowal).
- MR2677781. <http://www.ams.org/mathscinet-getitem?mr=2677781> Review of Jin, Bangti; Zou, Jun Hierarchical Bayesian inference for ill-posed problems via variational method. *J. Comput. Phys.* 229 (2010), no. 19, 73177343. (Reviewer: Barbara Zubik-Kowal).
- MR2733338 <http://www.ams.org/mathscinet-getitem?mr=2733338> Review of Ishak, Fuziyah; Suleiman, M. B. *Parallel block method for solving delay differential equations*. *Int. Math. Forum* 5 (2010), no. 53-56, 27072722. (Reviewer: Barbara Zubik-Kowal).
- MR2721183 <http://www.ams.org/mathscinet-getitem?mr=2721183> Review of Xu, Y.;

- Zhao, J. J.; Sui, Z. N. Exponential Runge-Kutta methods for delay differential equations. *Math. Comput. Simulation* 80 (2010), no. 12, 23502361. (Reviewer: Barbara Zubik-Kowal).
- MR2719818 <http://www.ams.org/mathscinet-getitem?mr=2719818> Review of Yu, Yuxin; Wen, Liping *Stability analysis of one-leg methods for nonlinear functional differential and functional equations*. *J. Comput. Appl. Math.* 235 (2010), no. 3, 817824. (Reviewer: Barbara Zubik-Kowal).
 - MR2664181 <http://www.ams.org/mathscinet-getitem?mr=2664181> Review of Appleby, J. A. D.; McCarthy, M.; Rodkina, A. *Growth rates of delay-differential equations and uniform Euler schemes. Difference equations and applications*, 117124, Uğur-Bahçeşehir Univ. Publ. Co., Istanbul, 2009. (Reviewer: Barbara Zubik-Kowal).
 - MR2385765 <http://www.ams.org/mathscinet-getitem?mr=2385765> Liu, Zeqing; Kang, Shin Min; Ume, Jeong Sheok *Existence and iterative approximations of nonoscillatory solutions of higher order nonlinear neutral delay differential equations*. *Appl. Math. Comput.* 193 (2007), no. 1, 7388. (Reviewer: Barbara Zubik-Kowal),

National and International Research Grants:

- VIGRE Travel Grant, (2011).
- COAS Travel Grant, (2010).
- WBT Grant, Warsaw BioMat Team, (2009)
- NSF AWM Grant, (2009).
- COAS Travel Grant, (2008).
- FRAP Faculty Research Associates Program (2006-2007).
- COAS Travel Grant, (2006).
- COAS Travel Grant, (2004).
- NSF AWM Grant, (2003).
- COAS Travel Grant, (2002).
- BW Badania Wlasne - Polish Science Foundation, (2000-2001).
- EPSRC Grant - Engineering and Physical Sciences Research Council, (1999-2000).
- NWO Nederlandse organisatie voor wetenschappelijk onderzoek - Dutch Science Foundation, (1998-1999).
- FWO Vlaanderen - Belgian Funds for Scientific Research, (Feb.1997-July 1998).

Talks at International Conferences:

- **Canada**, Vancouver, British Columbia, July 2011, 7th International Congress on Industrial and Applied Mathematics, ICIAM11.
- **USA**, University of Iowa, March 2011, AMS Meeting, Special Session on Numerical Analysis and Scientific Computing.
- **USA**, University of Iowa, March 2011, VIGRE Workshop on Numerical Analysis and Scientific Computing.
- **United Kingdom**, University of Brighton, July 2010, The Eleventh International Conference on Integral Methods in Science and Engineering, IMSE2010.
- **China**, Beijing, May 2009, International Conference on Scientific Computation and Differential Equations, SciCADE09.
- **Belgium**, Gent, July 2008, 13th International Congress on Computational and Applied Mathematics, ICCAM08.
- **Switzerland**, Zurich, July 2007, 6th International Congress on Industrial and Applied Mathematics, ICIAM07.
- **Romania**, Cluj-Napoka, July 2006, International Conference on Numerical Analysis and Approximation Theory, NAAT06.
- **Poland**, Gdansk, June 2005, International Conference on Differential-Functional Equations, DFE05.
- **Japan**, Nagoya, May 2005, International Conference on Scientific Computation and Differential Equations, SciCADE05.
- **Poland**, Krakow, June 2004, International Conference on Computational Science, ICCS04.
- **USA**, Arizona State University, Tempe, May 2004, 3rd International Conference on The Numerical Solution of Volterra and Delay Equations.
- **Norway**, Trondheim, June 2003, International Conference on Scientific Computation and Differential Equations, SciCADE03.
- **Canada**, Vancouver, British Columbia, August 2001, International Conference on Scientific Computation and Differential Equations, SciCADE01.
- **United Kingdom**, Bath, September 2000, 2nd International Conference on Boundary Integral Methods.
- **Australia**, Queensland, Fraser Island, August 1999, International Conference on Scientific Computation and Differential Equations, SciCADE99.
- **The Netherlands**, Utrecht, April 1999, Het 34e Nederlands Mathematisch Congres.
- **New Zealand**, Auckland, July 1998, Auckland Numerical Ordinary Differential Equations ANODE98.
- **Italy**, Grado, September 1997, International Conference on Scientific Computation and Differential Equations, SciCADE97.
- **United Kingdom**, Dundee, June 1997, 17th Biennial Conference on Numerical Analysis.

- **USA**, Arizona State University, Tempe, May 1996, 2nd International Conference on The Numerical Solution of Volterra and Delay Equations.

Plenary & Invited Minisymposia Talks at International Conferences:

- **Canada**, Vancouver, British Columbia, July 2011, ICIAM11.
- **United Kingdom**, University of Brighton, July 2010, IMSE10
The Eleventh International Conference on Integral Methods in Science and Engineering
- **Poland**, Warsaw, June 2009, International Workshop on Mathematical and Computational Approaches in Biology and Medicine
- **China**, Beijing, May, 2009, SciCADE09
The International Conference on Scientific Computation and Differential Equations
- **Poland**, University of Gdansk, June 2005
The International Conference on Differential-Functional Equations
- **USA**, Arizona State University, May 2004
The 3rd International Conference on The Numerical Solution of Volterra and Delay Equations
- **Norway**, Trondheim, July, 2003, SciCADE03
The International Conference on Scientific Computation and Differential Equations

Invited Colloquium Talks:

- Poland, Medical University of Gdańsk, February 2010.
- Poland, University of Warmia and Mazury, January 2010.
- Poland, University of Warmia and Mazury, June 2007.
- USA, Arizona State University, March 2005.
- Poland, Gdansk University, June 2003.
- Poland, Technical University of Gdansk, June 2003.
- United Kingdom, University of Cambridge, May 2000.

Other (but not all) Colloquium Talks:

- Poland, University of Warmia and Mazury, January 2010.
- USA, Boise State University, October 2008.
- USA, Boise State University, January 2005.
- USA, Arizona State University, November 2001.
- Poland, University of Gdansk, December 2000.
- United Kingdom, University of Reading, April 2000.
- United Kingdom, Strathclyde University, October 1999.
- The Netherlands, University of Leiden, May and November 1998.
- United Kingdom, Heriot-Watt University, February 1998.
- Belgium, Katholieke Universiteit Leuven, March 1997.

Invitation to organize Minisymposium at International Conference:

- Japan, Nagoya, 2005, SciCADE

Minisymposium on “Numerical Methods for Problems with Functional Dependence” at the International Conference on Scientific Computation and Differential Equations, SciCADE05.

Graduate, Undergraduate, Math and Engineering Seminars:

- 2009 - Spring: Research talk for the Department of Mechanical and Biomedical Engineering, College of Engineering, Title: *Parallel algorithms for functional differential equations*

- 2008 - Fall: Research talk for the Graduate Math Seminars

Title: *Ordinary and partial functional differential equations*

- 2007 - Spring: Research talk for the Undergraduate Seminar

Title: *Numerical methods for the growth of human tumor cells*

- 2006 - Fall: Research talk for the Graduate Math Seminars

Title: *Error bounds derived for thalamo-cortical systems*

- 2005 - Spring: Research talk at the Math Seminar

Title: *Numerical solutions to differential equations*

- 2004 - Spring: Research talk at the Math Seminar

Title: *Iteration methods for partial differential equations*

Teaching experience in Europe:

- Poland, Department of Mathematics, University of Gdańsk
 - Numerical Analysis, regular academic classes
 - Differential Equations, regular academic classes
 - Computer Science, regular academic classes
 - Calculus, regular academic classes
- The Netherlands, Department of Mathematics, Leiden University
 - supervised students working on Numerical Stability Theory

Teaching experience in the USA, since August 2001:

Semester	Academic Classes	Units per week	Semester	Academic Classes	Units per week
Fall11	Math 175, Sec.2 (40 students)	4 × 50min	Spring12	Math 537 Tu,Th	2 × 75min
	Math 175, Sec.3 (40 students)	4 × 50min		Math 170 Mo,Tu,We,Fr	4 × 50min
	Math 593, Sec.1	3 × 50min		Math 593 Mo,Tu,Fr	3 × 50min
Fall10	Math 565/465	3 × 50min	Spring11	Math 566	3 × 50min
	Math 175, Section 6	4 × 50min		Math 533/433	3 × 50min
				Math 593, Section 1	1 × 50min
Fall09	Research Semester		Spring10	Sabbatical Semester	
Fall08	Math 536/436	3 × 50min	Spring09	Math 537	3 × 50min
	Math 170, Section 4	4 × 50min		Math 496	1 × 75min
	Math 170, Section 5	4 × 50min		Math 170, Section 3	4 × 50min
		Math 170, Section 4		4 × 50min	
Fall07	Math 333	4 × 50min	Spring08	Math 567	3 × 50min
	Math 175	4 × 50min		Math 175	4 × 50min
Fall06	Math 175	4 × 50min	Spring07	Math 170	4 × 50min
	Math 171	1 × 50min		FRAP Research Grant	4 × 50min
	FRAP Research Grant	3 × 50min			
Fall05	Math 301	4 × 50min	Spring06	Math 333	4 × 50min
	Math 175	4 × 50min		Math 160	4 × 50min
Fall04	Math 436	3 × 50 min	Spring05	Math 333	4 × 50min
	Math 170	4 × 50 min		Math 170	4 × 50min
Fall03	Math 333	4 × 50 min	Spring04	Math 175	4 × 50 min
	Math 170	4 × 50 min		Math 170	4 × 50 min
Fall02	Math 175	4 × 50 min	Spring03	Math 170	4 × 50 min
	Math 175	4 × 50 min		Math 170	4 × 50 min
Fall01	MAT 342, Arizona State	3 × 50 min	Spring02	MAT 342, Arizona State	3 × 50 min
	MAT 342, Arizona State	3 × 50 min		MAT 342, Arizona State	3 × 50 min

- USA, Boise State University, Department of Mathematics
 - Thesis Research MATH 593
 - Numerical Methods for Ordinary Differential Equations MATH 567
 - Numerical Analysis MATH 565/465, 566
 - Applied Mathematics MATH 537
 - Partial Differential Equations MATH 536/436
 - Ordinary Differential Equations MATH 533/433
 - Independent Study MATH 496
 - Differential Equations with Matrix Theory MATH 333
 - Linear Algebra MATH 301
 - Calculus MATH 170, 171, 175
 - Survey of Calculus MATH 160
- USA, Arizona State University, Department of Mathematics,
Visiting Assistant Professor, Aug. 2001 - May 2002
 - Linear Algebra, MAT 342

Service - International

Reviewer for new books:

- *Elsevier Science/ Academic Press*
- *Chapman & Hall/ CRC*
- *Pearson*
- *Birkhäuser*
- *SIAM, Society for Industrial and Applied Mathematics*
- *Springer*

Reviewer for International Journals:

- *Journal of Computational and Applied Mathematics* • *SIAM Review, Education section* • *SIAM Journal of Numerical Analysis* • *SIAM Journal of Scientific Computing* • *MathSciNet Mathematical Reviews* • *IMA Journal of Numerical Analysis* • *Mathematics and Computers in Simulation* • *Nonlinear Analysis Series B: Real World Applications* • *IMACS Journal of Applied Numerical Mathematics* • *American Institute of Physics (AIP) Conference Series, Numerical Analysis & Applied Math* • *Advances in Computational Mathematics* • *Mathematical and Computer Modelling* • *Soochow Journal of Mathematics* • *Annales Polonici Mathematici* • *Mathematical Modelling and Analysis* • *Computing* • *Computers and Mathematics with Applications* • *Communications in Nonlinear Science and Numerical Simulations* • *Journal of Mathematical Analysis and Applications* • *International Journal of Mathematics and Mathematical Sciences* • *Applied Mathematics and Computation*

Chair for Sessions at International Conferences

Service - National

- Reviewer for the NSF: Division of Mathematical Sciences
- Reviewer for Mathematical Reviews, American Mathematical Society
- Consultation for Editorial Board, *W.H. Freeman Publishers*

Service - University

- BSU HPC Cluster Committee
- Contribution in the application for the BSU Beowulf cluster
- Recognition of Outstanding Faculty Service
- Implementation of the Foundations Program

Service - College

- Service on the College of Arts and Sciences Honors and Awards Committee

- Math Department's Chair Selection Committee
- Science Competition Day Exam, Mathematics Section
- Academic advising

Service - Departmental

- Mathematics Finishing Foundations Committee, Member since February 2011
- Tenure Progress Committee, Member since Fall 2010
- Colloquium Committee, Chair since Fall 2008
- Calculus Committee, Chair since Fall 2007
- Colloquium Committee, Member since Fall 2007
- Applied Mathematics Committee, Member since Fall 2002
- Calculus Committee, Member since Fall 2002
- Applied Courses Subcommittee, Member since Fall 2007
- Grading in Problemathon