CURRICULUM VITAE

Barry McQuarrie

IDENTIFYING INFORMATION

Academic Rank

Associate Professor in Mathematics

Education

Degree	Institution	Date Degree Granted
B.S.	University of Winnipeg Mathematics & Physics	1990
M.Math.	University of Waterloo Applied Mathematics *Energy Eigenvalues of Perturbed Relativistic Schrodinger Equations*, Advisor: E.R. Vrscay.	1992
Ph.D.	University of Manitoba Semiclassical Quantum Mechanic/Physics *Molecular Collisions: Effect on the HD Infrared Spectrum and Development of a Moyal Quantum Mechanical Description*, Advisors: G.C. Tabisz and T.A. Osborn.	1998

Positions/Employment

- University of Minnesota, Morris — Aug 2000 – present year
  - Associate Professor — Aug 2006 – present year
  - Assistant Professor — Aug 2000 – Aug 2006

- Postdoctoral Fellow — Aug 15 1998 – Jul 15 2000
  Chemical Physics Theory Group (Paul Brumer)
  Dept. of Chemistry
  University of Toronto
  Toronto, ON M5S 1A1 Canada

Current Membership in Professional Organizations

- The Mathematical Association of America (MAA) (2001--Present).
- Society for Industrial and Applied Mathematics (SIAM) (1999--Present).
- The American Physical Society (APS): Divisions: Atomic, Molecular, and Optical Physics (DAMOP) (1998--Present).

HONORS AND AWARDS FOR RESEARCH/CREATIVE WORK, TEACHING, PUBLIC ENGAGEMENT, AND SERVICE

University of Minnesota

- Morse Undergraduate Teaching Award (2008).
- Named to "Who's Who Among America's Teachers" (2004, 2005).

Graduate Honors and Awards

- Nominated by The University of Manitoba for the NSERC Doctoral Prize (1999).
- NSERC PGS-B Scholarship (Sep 1992—Sep 1994).
- University of Waterloo Graduate Fellowship (Jan 1992, May 1992).

Undergraduate Honors and Awards

- University of Winnipeg Gold Medal in Physics (General) (May 1990).
- University of Winnipeg Board of Regents Academic Proficiency Scholarship (1989).
- University of Winnipeg Student of Highest Distinction (1988/89, 1989/1990).
- University of Winnipeg Student of Distinction (1987/88).
- University of Winnipeg Board of Regents Special Entrance Scholarship (1985).

RESEARCH, SCHOLARSHIP, AND CREATIVE WORK

Grants and Contracts

University Sources

- Sabbatical Salary Supplement (2011/12).
- Educational Development (EDP) Grant *Precalculus Math 1012/1013 Online Materials* ($1616) (Summer 2012).
- Out of State Travel Allowance (May 2001, May 2003, January 2008, July 2012).
- Achieve Grant to create online mathematics course ($6000) (Summer 2010).
- Faculty Enrichment Program Grant Mentor ($500 stipend) (2005/06).
- Faculty Enrichment Program Grant Mentee ($250 stipend) (May 2001).

Publications

Refereed Journal Articles

All papers collaboratively written, McQuarrie contributed analysis of methods applied in papers as well as computational programming.

- McQuarrie, Barry R., Abrashkevich, Dmitri G., and Brumer, Paul (2003) Classical Wigner phase space approximation to cumulative matrix elements in coherent control, *Journal of Chemical Physics* 119: 3606-3618.
- McQuarrie, B.R., and Brumer, Paul (2000) Semiclassical initial value representation techniques for chaotic systems, *Chemical Physics Letters* 319: 27-44.

- Osborn, T.A., Kondrat'eva, M.F., Tabisz G.C., and McQuarrie, B.R. (1999) Mixed Weyl symbol calculus and spectral line shape theory, *Journal of Physics A: Mathematical and General* 32: 4149-4169.
- McQuarrie, B.R., Osborn, T.A., and Tabisz, G.C. (1998) Semiclassical Moyal quantum mechanics for atomic systems, *Physical Review* A 58: 2944-2961.
- McQuarrie, B.R., and Tabisz, G.C. (1996) Collisional Interference in the Infrared Spectrum of HD: Calculation of the Line Shape of Vibrational Transitions for HD-He, *Journal of Molecular* Liquids 70: 159-168.
- McQuarrie, B.R., Tabisz, G.C., Gao, B., and Cooper J. (1995) Role of the induced dipole moment in the collisional interference in the pure rotational spectrum of HD-He and HD-Ar, *Physical Review A* 52: 1976-1981.
- McQuarrie, B.R., and Vrscay, E.R. (1993) Rayleigh-Schrodinger perturbation theory at large order for radial Klein-Gordon equations, *Physical Review A* 47: 868-875.

Proceedings of Conferences

- Tabisz, G.C. (presenter), McQuarrie, Barry R., and Osborn, T.A. (2006) Collision-Broadened Line Shapes: A Different Perspective via Moyal Quantum Mechanics in *Spectral Line Shapes* vol. 18, Proceedings of the 18th International Conference on Spectral Line Shapes, edited by Eugene Oks, American Institute of Physics, New York: 151-161. (not refereed)
- McQuarrie, B.R. (1999) Proceedings of the Faraday Discussion 113: Stereochemistry and Control in Molecular Reaction Dynamics. (not referred)
- McQuarrie, B.R., Osborn, T.A., Kondrat'eva, M.F., and Tabisz, G.C. (presenter) (1999) Moyal Quantum Dynamics: Atomic Scattering and Line Shapes in *Spectral Line Shapes* vol. 10, Proceedings of the 14th International Conference on Spectral line Shapes, edited by R. Herman, American Institute of Physics, New York: 332-335. (not referred)
- McQuarrie, B.R., and Tabisz, G.C. (presenter) (1997) Collisional Interference in the Vibration-Rotation Spectrum of HD-He in *Spectral Line Shapes* vol. 9, Proceedings of the 13th International Conference on Spectral line Shapes, edited by M. Zoppi and L. Ulivi, American Institute of Physics, New York: 507-510. (not referred)
- Tabisz, G.C. (presenter), McQuarrie, B.R., Gao, B., and Cooper, J. (1995) Collisional interference in the Rotational Spectrum of HD-He in *Laboratory and Astronomical High Resolution Spectra*, edited by A.J. Sauval, R. Blomme, and N. Grevesse, Astronomical Society of the Pacific, San Francisco: 312-313. (not referred)

Presentations, Posters, and Exhibits

Abstracts

- Mahmood, M. (presenter) and McQuarrie, B.R. (2003) New Statistical Distributions via a Differential Equation Approach, presented and abstract published in Hawaii International Conference on Statistics and Related Fields.

Posters or Exhibitions

- McQuarrie, Barry R. (presenter), Abrashkevich, Dmitri G., and Brumer, Paul (2003) Classical-Wigner Phase Space Approximation to Cumulative Matrix Elements in Coherent Control, poster presented at the meeting of the Division of Atomic, Molecular, and Optical Physics of the American Physical Society (DAMOP), Boulder, Colorado, USA.

- McQuarrie, B.R. (presenter) and Brumer, Paul (2001) Semiclassical Approximation to Direct Part of Channel Specific Photodissociation Cross Sections, poster presented at the Joint meeting of the Division of Atomic, Molecular, and Optical Physics of the American Physical Society (DAMOP) and the Division of Atomic and Molecular Physics of the Canadian Association of Physicists (DAMP), London, Ontario, Canada.
- McQuarrie, B.R. (presenter) and Brumer, Paul (2000) Semiclassical Initial Value Representation Techniques for Chaotic Systems, poster presented at the Canadian Association of Physicists Congress, York University, Canada.

Other Key Activities and Accomplishments

- Attended 2012 Society for Industrial and Applied Mathematics (SIAM) Annual Meeting, Minneapolis, Minnesota, USA (July 2012).
- Attended Joint National Meeting of American Mathematical Society (AMS) & Mathematical Association of America (MAA), San Diego, California, USA (January 2008).
- Attended The Mathematical Association of America (MAA) North Central Section Fall 2006 Meeting, University of Minnesota, Morris (October 27--28, 2006).
- Barry R. McQuarrie, (January 29, 2004) A Semiclassical Approach to Molecular Photodissociation, talk given in the UMM Chemistry Discipline's seminar series.
- Attended Meeting of the Division of Atomic, Molecular, and Optical Physics of the American Physical Society (DAMOP), Boulder, Colorado, USA (May 2003).
- Attended Joint meeting of the Division of Atomic, Molecular, and Optical Physics of the American Physical Society (DAMOP) and the Division of Atomic and Molecular Physics of the Canadian Association of Physicists (DAMP), London, Ontario, Canada (May 2001).
- Attended Canadian Association of Physicists (CAP) Congress, York University, Canada (June 2000).
- Attended Faraday Discussion 113: Stereochemistry and Control in Molecular Reaction Dynamics, University of Leeds, UK (July 1999).

TEACHING AND CURRICULUM DEVELOPMENT

University of Minnesota

Courses, Seminars, and Instructional Units Taught

- MATH 4994 Senior Honors Project
- MATH 4993 Directed Study: Borel Resummation, 2cr
- MATH 4993 Directed Study: Navier-Stokes Equations, 2cr
- MATH 4993 Directed Study: Random Number Generation, 1cr
- MATH 4901 Senior Seminar
- MATH 4452 Mathematical Modeling
- MATH 4401 Numerical Methods
- MATH 3993 Directed Study: Partial Differential Equations, 2cr
- MATH 3993 Directed Study: Fitting Differential Equations to Data Using Least Squares, 2cr
- MATH 2993 Directed Study: Topics in Differential Equations, 1cr
- MATH 2401 Differential Equations
- MATH 2101 Calculus III
- MATH 1993 Directed Study: Mathematics in Society, 2cr
- MATH 1102 Calculus II

- MATH 1101 Calculus I
- MATH 1014 Intensive Precalculus
- MATH 1013 Precalculus II: Trigonometry
- MATH 1012 Precalculus I: Functions
- MATH 1011 Precalculus
- MATH 1001 Excursions in Mathematics (prior to 2015 titled Survey of Math)
- MATH 0901 Basic Algebra
- IS 1051 Intro College Learning Skills (Math Component)
- IS 1001 First Year Seminar: Beauty, Ritual, and Identity

Curriculum Development
(courses, seminars, laboratories, curriculum guides, assessment activities for student learning, service learning materials, rubrics, etc.)

- Created rubric for assessing Math discipline Program Service Learning Outcome (PSLO) 2: *Help students develop competence in problem solving, mathematical techniques and methods, and quantitative reasoning.* (2015).
- Created online course Math 1014 Intensive Precalculus hosted on Moodle. (summer 2010, Achieve Grant $6000 stipend)
    - Technologies incorporated included:
        - Online Office Hours with electronic whiteboard (UMConnect).
        - Guided Examples with narration using Intuos4 tablet (Camtasia Relay and Media Mill).
        - Online Homework (WeBWorK).
        - Discussion Forum for each topic.
        - Lecture Notes and Practice Problems (LaTeX).
- Created the First Year Seminar IS 1001 Beauty, Ritual, and Identity. (fall 2005)
    - The seminar examines ideas about the body, including beauty, ritual, and ceremony, focusing on how personal identity and culture interact.
- Created under the umbrella course Math 4450 Variable Topics in Applied Mathematics the course Math 4452 Mathematical Modeling. (spring 2002)
    - The course shows a wide range of mathematical methods (optimization, continuous and discrete dynamical systems, and probability) implemented in real world modeling situations.

Faculty Development Activities regarding teaching

- Presented *Use of Wacom Tablet to Create Videos* at the Active Learning and Flipped Instruction (August 15, 2013).
- Facilitated a session with Peter Dolan on *Senior Capstone Projects and Student Learning Outcomes* at the 2012 COPLAC Summer Faculty Institute on Liberal Learning in the Disciplines: Mathematics, Asheville, North Carolina, USA (June 7-10, 2012).
- Presented *Resources for an Online Precalculus Course* at the UMM Wine and Wikis Technology Showcase (April 17, 2012).
- Completed the training: Quality Matters: Build Your Online Course (May 2011).
- Attended Academy of Distinguished Teachers (ADT) Annual Retreats
    - *Sustaining and Renewing Teaching and Learning in Times of Change (October 9-11, 2009).*
    - *Responding to Diverse Learners* (October 10-12, 2008).
- Attended UMM Fall Faculty Retreats

  - (August 17-18, 2009).
  - *Planning for the Future: Making it Happen* (August 20-21, 2007).
  - *Enhancing Our Academic Environment* (August 21-22, 2006).
  - *Collegiality and Rhythms of Academic Life* (August, 2005).
  - *Teaching and Learning for a Multi-Cultural Society* (August 2004).
  - *Enhancing Learning and Teaching Through Technology Strategies* (August 2001).
  - *Service Learning* (August 2000).
- Participated in the mini-conference on teaching excellence at UMM entitled *Opening the Door: Sharing the Craft of Teaching* (April 1 2002).
- Official Observer in a study of Teaching Assistant habits, University of Toronto, Department of Physics (Contact: Prof. Anthony Key) Duties: Observe TA during lab session, noting certain behaviors and interaction patterns, in an effort to determine if certain behavior patterns influenced student learning (November 1999).

ADVISING AND MENTORING

University of Minnesota

Undergraduate Student Activities

Undergraduate Research Projects

- Supervised Saesun Kim (UMM 2015) in the UMM Howard Hughes Medical Institute (HHMI) Undergraduate Summer Research Program for the project titled *Using B-Splines to Determine Parameters in Differential Equation Models* (Summer 2014, $1500 stipend).
- Supervised student Justin Irlbeck (UMM 2013), who presented the oral presentation *Estimating Parameters in a Continuous Dynamical System* at the 2014 Undergraduate Research Symposium at the University of Minnesota, Morris (April 2014).
- Supervised Molly Grove (UMM 2015) and Justin Irlbeck (UMM 2014) in the UMM Howard Hughes Medical Institute (HHMI) Undergraduate Summer Research Program for the project titled *Estimating Parameters in Dynamical System Models* (Summer 2013, $3000 stipend).
- Morris Academic Partnership (map) for the project titled *Advanced Techniques for Summing Divergent Series* with David Nieves (UMM 2010) (summer/fall 2008). This work was presented by David Nieves as *Divergent Series and Related Convergent Series* at the 2009 Undergraduate Research Symposium at the University of Minnesota, Morris (April 2009).
- Supervised Katherine Struss (UMM 2010), who presented the oral presentation *A Chaotic Image Encryption* at the 2009 Undergraduate Research Symposium at the University of Minnesota, Morris (April 2009).
- Supervised Christopher Orth (UMM 2006), who presented the oral presentation *Borel Resummation of a Divergent Series* at the 2006 Undergraduate Research Symposium at the University of Minnesota, Morris (April 2006).
- Morris Academic Partnership (map) for the project titled *Bivariate Statistical Distributions via a Partial Differential Equations Approach* with Chris Zabinski (UMM 2004) (2003/04).
- Supervised student Daniel Enderton (UMM 2002), who presented the poster *Multidimensional Integration* at the 2002 Undergraduate Research Symposium at the University of Minnesota, Morris (April 2002).

Undergraduate Capstone Projects

Math Senior Seminars Supervised

- Singular Value Decomposition (2014/15) R. Wynn
- Dynamical Systems in Economics (2014/15) N. Hughes
- Markov Chains in Ecology (2015) M. Anderson
- Finite Element Method (FEM) for an Elliptic PDE (2014/2015) C. Landrus
- Modeling the Growth of Epidemics (2014/2015) C. Lewis
- Gershgorin Circle Theorem (2014/2015) J. Clark
- Lyapunov Functions in Dynamical System: An HIV infection model (2013/14) H. Knott
- Modeling Romantic Relations with Dynamical Systems (2013/14) A. Chock
- Rotations in Lie Theory (2013/14) E. Molden
- Quantum Perturbation Theory (2012/13) R. Smith
- Edge Coloring of Graphs to Model Sporting Tournaments (co-advisor Mark Logan) (2011) D. Fragodt
- Crossing Number in Complete Graphs (co-advisor Peh Ng) (2011) D. Rach
- Dual Systems (2010/11) E. Wessel
- Lie Algebras (2010/11) L. Owen
- Finite Element Method (2010/11) N. Grieme
- Dynamical Systems with Applications in Neuroscience (2009/10) D. Nieves
- Modeling Tumor Cell Population with Stochastic Noise Variables (2009/10) T. Williams
- An Application of Markov Chains (2009/10) K. Holt
- The Billiards Problem (2009) S. Duffy
- A Chaotic Image Encryption (2008/09) K. Struss
- How Flat Can a Soap Bubble Be? (2007/08) L. Stone
- Deterministic Problems in Genetics Using Dynamical Systems (2006/07) L. Paulson
- Finite Markov Chains and Processes (2006/07) T. Cathers
- Modeling Catalytic Converters (2005/06) A. Johnson
- Modeling Traffic Flow (2005/06) D. Metcalf
- Pade and Algebraic Approximants Applied to the Quantum Anharmonic Oscillator (2005) C. Orth
- Population Landscapes in Evolutionary Computation (2004/05) D. Harms
- Summation of Divergent Series (2003/04) C. Zabinski
- Fractional Derivatives: The Mystery of What's Between Integer-Order Derivatives (2003/04) M. Gilkey
- Linear Algebra Techniques for Solving Differential Equations (2003/04) C. LaForge
- Finite Difference Solution to a Linear Partial Differential Equation (2003) J. Kallstrom
- Getting Around That $%$#% Corner (2002/03) P. Westby
- Cylcotomic Ploynomials at a High School Level (2002) J. Stenberg
- Loess: A Nonparametric Data Smoother (2002) B. Gluth
- Multidimensional Numerical Integration (2001/02) D. Enderton
- Solving the Time Independent Schrodinger Equation (2001/02) Z. Heinen
- Pendulums Through the Years (2000/01) A. Simon
- Using Mathematical Models to Describe Epidemiology (2000/01) (co-advisor Peh Ng) J. Brown

Undergraduate Advising

- 2015/16: 21 Advisees

- Faculty Advisor to first-year students through the Great Lakes College Success Grant (2013-2015, $2000 annual stipend).
- UMM Master Advisor (2012-2014, $2500 annual stipend).
- Summer Registration: Assisted students from a variety of declared majors who had been admitted with special conditions (typically a credit limit for their first semester) ($50 per session) (2009, 2010, 2011).
- Participating in The Deciding Project, a pilot advising program at UMM for entering first year students who are undecided about their majors (fall 2004-2010).
- Supervised Undergraduate Teaching Opportunities Program (UTOP) awarded to David Nieves (UMM 2010) by the Academy of Distinguished Teachers. Student assisted in teaching Calculus I (beyond what a TA typically does) and we engaged in weekly discussions centered on teaching at the university level. (spring 2010, $1000 stipend to spend on teaching materials).
- Created a flowchart of the prerequisite structure of the mathematics major (fall 2003-present)
- Created a sample 5-year course plan for Mathematics majors seeking secondary education teaching licensure (July 2001-present).

Other Mentoring Activities

- Faculty Teaching Mentor to Hannah Altmann (mathematics) (2015/16).
- Faculty Teaching Mentor to Lauri Wyum (economics) (2014/15).
- Faculty Teaching Mentor to Eric Miles (mathematics) (2014/15).
- Faculty Mentor to Merc Chasman (mathematics) (2012-16).
- UMM math instructor contact for calculus course and transfer agreement with Shanghai University of Finance and Economics (SUFE) ($3000 initial, $1500 following years) (2009-present).
- Advising Mentor to Chris Atkinson and Stephen Crabtree (2013).
- Faculty Teaching Mentor to Kevin Stefanek (sports management) (2012/13).
- Advising Mentor to Merc Chasman (mathematics) (2012).
- Participated in the Next Generation of the Professoriate program as a faculty mentor ($250 stipend) (2003/04). Attended two day workshop (January 8-9, 2004) on instructional technology.
- *Enhancing Student Learning Through Innovative Teaching and Technology Strategies* Bush Triad group member which focused on the use of LaTeX in teaching ($300 stipend) (2003/04).
- Division of Science and Mathematics 'Teaching Buddy' (help acclimate a new faculty member to UMM) (fall 2003).

SERVICE AND PUBLIC OUTREACH

Service to the Discipline/Profession/Interdisciplinary Area(s)

Editorships/Journal Reviewer Experience

- Referee for *Journal of Physics A: Mathematical and Theoretical* (2004, 2007, 2011 (2 articles), 2012, 2013, 2015).
- Referee for *Physica Scripta* (2013).
- Referee for *Journal of Physics B: Atomic, Molecular & Optical Physics* (2009(2 articles)).
- Referee for *International Journal of Computer Mathematics* (2007, 2008).

Program Review Experience

- Wrote the Internal UMM Mathematics Program Review (2015/16).
- Member of Internal UMM Review Committee for Chemistry Program Review (2010).
- Chair of Self-Study Subcommittee #3: Criterion Three: Student Learning and Effective Teaching as part of Accreditation Report (2008/09).

Service to the University/College/Department

University of Minnesota

- HHMI Inclusive Excellence Grants 2017 Pre-Proposal Core Team Member (direct proposed improvements to mathematical readiness training) (fall 2015).
- UMM Chancellor Search Committee Member (2015/16).
- Economics Discipline Tenure Track Position Search Committee Member (2015/16).
- Admissions Director Search Committee Member (summer 2015).
- Student Affairs Committee Member (fall 2012-spring 2014).
- Academic Alert Team Committee Member (fall 2012-present).
- Chair of Committee on Academic Integrity (one case fall 2014).
- Office of Academic Success/Disability Services (OAS/DS) Working Group Member (fall 2012).
- Financial Aid Satisfactory Academic Progress (SAP) Appeals Committee Member (fall 2009-summer 2011).
- Faculty Affairs Committee Member (2009-11).
- Chair of Scholastic Committee (summer 2007-spring 2010).
- Chair of Financial Aid Satisfactory Academic Progress (SAP) Appeals Committee (summer 2007-fall 2009).
- Student Scholastic Standing Committee (SSSC) Member (summer 2006, 2007, 2008, 2009).
- Chair of Program Coordinator in Academic Assistance Search Committee (summer 2008).
- Scholastic Committee Member (2001-04, 2006/07).
- Committee on Academic Integrity (2002/03, 2006/07, summer 2010, 2015).
- Convener of Academic Integrity web site creation subcommittee (2004/05).
- Convener of Academic Integrity Brochure Revision subcommittee (2003).
- Co-Chair of UMM's Academic Alert Committee (spring 2005-fall 2007).
- Financial Aid Satisfactory Academic Progress (SAP) Appeals Committee (Alternate Member) (2005-summer 2007).
- Student Counseling Associate Counselor Search Committee Member (spring 2007).
- Admissions Counselor and International Admissions Counselor Search Committee Member (spring 2007).
- Teacher Education Committee Member (2005/06).
- Division of Science and Mathematics Grievance Officer (2005-07).
- Computer Science Tenure Track Position Search Committee Member (2004/05).
- Elementary Education Tenure Track Position Search Committee Member (2005).
- Writing Subcommittee Member (2004/05).
- Morris Academic Staff Award Committee Member (spring 2005).
- UMM's Early Alert/At Risk Student Intervention Committee Member (fall 2004).
- Physics Tenure Track Position Search Committee Member (2003/04).
- Kaufman-McCree Award Committee Member (spring 2001, 2002, 2014).

Department/Unit Service

- Chair of Mathematics Temporary Position Search Committee (summer 2010, 2012/13, spring 2015).
- Mathematics Discipline Education Division Liaison (2007 PEPER, 2014, 2016 PERCA Math course mapping).
- Mathematics Discipline Bulletin Revision Paperwork Coordinator (fall 2002-2016 even years).
- Mathematics Discipline Coordinator (fall 2001, spring 2004, spring 2007, 2009/10, 2013/14).
- Mathematics Discipline TA Organizer (2010/11, 2012-2014).
- Mathematics Discipline WebWorK Coordinator (2012-2016).
- Mathematics Discipline Assessment Reports (2001--2011, 2013--present).
- Mathematics Tenure Track Position Search Committee Member (2001/02, 2002/03, 2009/10, 2010/11).
- Mathematics Discipline Webmaster (2002/03).
- Mathematics Discipline Class Scheduling (2002/03).
- Mathematics Temporary Position Search Committee Member (2002).
- Organized campus visit of Dr. John Hamilton of Kodak Research Lab through Society of Industrial and Applied Mathematics Visiting Lecture Program (fall 2001).

Public and Other Service

Community, State, National, or International Service Activities

- Assisted Jay Fier (Engineering Surveyor/Inspector for Morris) in calculating lot sizes on Circle Pines for use in assessment of sewer/road renovations (fall 2008).
- Assisted Jay Fier (Engineering Surveyor/Inspector for Morris) in calculating concrete amounts used in the Columbia Avenue road resurfacing project. Subsequently turned this question into an assignment used in Calculus II (fall 2004).
- Member of Stevens Community Humane Society. Redesigned SCHS website (2004).
- Completed Safe Zone I and II training (April 2004).
- Attended a reception at Eastcliff for potential UMM students around the Twin Cities (March 1, 2004). Event organized by UMM admissions office.
- Drafted and signed a letter for the Math Discipline which was sent to students admitted to UMM who identified themselves as potential math majors (2003 & 2004).
- Met with prospective students and their parents to discuss the mathematics program at UMM during the Education Minnesota Visit Days (October 2001).