CURRICULUM VITA (rev. March 27, 2017) for MICHAEL S. PILANT

NAME: Michael S. Pilant

CURRENT OFFICE ADDRESS AND PHONE NUMBER

Department of Mathematics Texas A&M University College Station, TX 77843-3368

Room 221-D Blocker Hall (409)-845-5631 (Office) (409)-845-3261 (Department) (409)-862-4190 (FAX)

E-MAIL ADDRESSES

mpilant@math.tamu.edu mpilant@email.tamu.edu mpilant@gmail.com

URL ADDRESSES

HOME PAGE: http://www.math.tamu.edu/~mpilant Online Masters: http://distance-ed.math.tamu.edu/

1 PROFESSIONAL APPOINTMENTS

- 1. Co-Director, Center for Technology-Mediated Learning in Mathematics (Higher Ed Programs), 2009-present
- 2. Program Coordinator, Division of Mathematics and Science, Texas A&M University at Qatar, 2006-2008
- 3. Associate Head, Department of Mathematics, 2002-2006
- 4. Professor, Departments of Mathematics, Aerospace Engineering and Computer Science, Texas A&M University, 1994-present.
- 5. Associate Director, Insitute for Scientific Computation, 1992-1996.
- 6. Associate Professor, Departments of Mathematics, Aerospace Engineering and Computer Science, Texas A&M University, 1990-1994.
- 7. Associate Professor, Department of Mathematics and Aerospace Engineering, Texas A&M University, 1988-1994.
- 8. Assistant Professor, Department of Mathematics, Texas A&M University, 1983-1988
- 9. Visiting Assistant Professor, Department of Mathematics, Texas A&M University, 1982-1983
- Visiting Assistant Professor, Department of Mathematics, University of New Mexico, 1981-1982

2 PROFESSIONAL INTERESTS

- Applied Mathematics
 - Nonlinear Partial Differential Equations
 - Computational Fluids, Mechanics, Asymptotics
- Computational Mathematics
 - Numerical Algorithms Algorithmic Development
 - Finite Element Methods
 - Parallel Methods, Domain Decomposition Methods
 - Multiresolution (Wavelet) Algorithms
 - Simulation of Nonlinear Systems
- Inverse Problems
 - Inverse Coefficient Problems for Parabolic and Elliptic Equations
 - Quantification of Uncertainty
- Visualization
 - Scientific Visualization
 - 3D Modeling
- Computer Aided Instruction
 - Web Based Instruction
 - Web Based Assessment
 - Adaptive Interfaces
 - Distance Learning
 - Mathematical Models for Assessment
- Software Engineering
 - Java Classes and Applets
 - Digital Libraries for Mathematics and Science
- Math Placement Exam (MPE)
 - Development of MPE1 33 question placement exam for STEM majors
 - Development of MPE2 33 question placement exam for non-STEM majors
 - Development of Ready-Set-Go 16 question placement exam for STEM majors

3 EDUCATION

- 1. B.S. Mathematics, University of Pittsburgh (1976)
- 2. M.S. Mathematics, New York University (Courant Institute) (1978)
- 3. Ph.D. Mathematics, New York University (Courant Institute) (1982)
 - Thesis Advisor Professor Cathleen S. Morawetz, Courant Institute, NYU.

4 SOCIETY MEMBERSHIPS

- 1. American Mathematical Society (A.M.S.)
- 2. Mathematics Association of America (M.A.A.)
- 3. Society for Industrial and Applied Mathematics (S.I.A.M.)
- 4. American Academy of Mechanics (A.A.M.)
- 5. Association of Computing Machinery (A.C.M.)
- 6. American Association for Computing in Education (A.A.C.E.)
- 7. Society for Values in Higher Education (S.V.H.E.)
- 8. Phi Beta Kappa

5 CONSULTING

- 1. Texaco EP&T, Houston, 1992-1994.
- 2. Microsoft, 1998, 2002.

6 UNIVERSITY ACTIVITIES

Current Committees:

- 1. Chair, Teaching Committee (2015-present)
- 2. Chair, Engineering Math Committee (2010-2016)
- 3. Member, College of Science Diversity Committee (2009-2014)
- 4. Member, College of Science Grievance Committee (2010-present)
- 5. Member, College of Science Information Technology Committee (1997-present)
- 6. Member, College of Science Technology Mediated Instruction Committee (2002-present).
- 7. Member, Math 150/151 Task Force (2010-present)
- 8. Member, Instructional Technology Council (2002-present)
- 9. Member, Department of Mathematics Computer Committee (2001-present)
- 10. Member, Provost's Task Force on Telecommunications and Informatics, (1998-present)

Recent Committees:

- 1. Member, Vision 2020 Imperative 4 Subcommittee (2010-2011)
- 2. Member, TAMUQ College of Science Promotion Committee (2009-2010)
- 3. Member, Department of Mathematics Executive Committee (2001-2006)
- 4. Member, Undergraduate Studies Committee (1999-2006)
- 5. Member, Departmental Honors Program (2002-2006)
- 6. Member, Department Head Search Committee, (2002)
- 7. Chair, Committee to Revise Help Sessions, (2002)
- 8. Chair, Math 131/142 Texbook Review Committee, (2002)
- 9. Member, Search Committee for the Director of Instructional Technology Services, (2001)
- 10. Faculty Advisor, NASA SHARP, (Summer 2001)

- 11. Member, Texas A&M University System Committee on Intellectual Property (1998-2000)
- 12. Representative, Texas A&M University, to the Alliance for Higher Education (Dallas, Tx), (1999-2000)
- 13. Member, Postdoctoral Committee, Department of Mathematics, (1999-2000)
- 14. Member, Subcommittee P, Department of Mathematics, (1999-2000)
- 15. Member, Jack Fields Scholarship Review Committee, Academy for Advanced Telecommunications and Learning Technologies, (Spring 1998)
- 16. Member, Telecommunications Task Force for the College of Science (1995-1998)
- 17. Faculty Advisor, Summer Honors Invitational Program, (Summer 1998)
- 18. Member, Search Committee for the Director of the Office of Distance Education (1997)
- 19. Member, Distance Education Task Force (1997-1997)
- 20. Member, Supercomputing Advisory Committee (1995-1998)
- 21. Member, Accomodating Future Computing Needs Committee (1995)
- 22. Member, National Science Board and Government-University-Industry Research Roundtable Project Novel Insights Subcommittee, TAMU, (1993-1995)
- 23. Member, Provost's Task Force on Video Instruction, (1993-1994)
- 24. Member, Executive Committee (1992-1994)
- 25. Member, Undergraduate Program Committee (1992-1993)
- 26. Member, Mathematics Head Search Committee II (1992-1993)
- 27. Member, Computational Classroom Advisory Committee (1990-1993)
- 28. Member, Departmental Computer Committees (1986-1993)
- 29. Member, TAMU Scholastic Dishonesty Inquiry Committee (1992)
- 30. Member, Promotion and Tenure Committee (1992-1993)
- 31. Chairman, Promotion and Tenure Committee (1991-1992)
- 32. Member, Mathematics Head Search Committee I (1991)
- 33. Member, College of Science Dean Search Committee (1991)
- 34. Member, Graduate Studies Committee (1989-1990)

7 AWARDS AND HONORS

- 1. Department of Mathematics, Outstanding Service Award, (2016)
- 2. Department of Mathematics, Outstanding Service Award, (2015)
- 3. Department of Mathematics, Outstanding Teaching Award, (2001)
- 4. Danforth Fellowship (1976-1980)
- 5. National Merit Scholarship (1972-1976)
- 6. Chancellor's Undergraduate Teaching Fellowship (1974)
- 7. Culver Award for Distinguished Undergraduate Mathematics (1974)
- 8. Culver Award for Distinguished Undergraduate Mathematics (1975)

8 PUBLICATIONS

8.1 Appearing in Print:

- 1. "Spinodal Decomposition in a Binary Liquid Mixture," J. Chem. Phys. 68 (2) 15 Jan. 1978 [69 citations]
- 2. "The Neumann Problem for an Equation of Lavrent'ev-Bitsadze Type," Journal of Math. Anal. Appl., v. 106, no. 2, pp. 321-359, March 1985. [MR 86i:35104] [9 citations]
- 3. (with Klaus Höllig) "Regularity of the Free Boundary for the Porous Medium Equation," Indiana University Mathematics Journal, v. 34, no. 4, pp. 723-733, Winter 1985. [MR 87k:35252] [8 citations]
- 4. "A Note on the Numerical Solution of the Von Karman Small Disturbance Equation," Communications in Applied Numerical Methods, vol. 1, 209-214, (1985).
- 5. (with William Rundell) "An Inverse Problem for a Nonlinear Parabolic Equation," Comm. in P.D.E., v. 11, no.4, pp. 445-457, 1986. [MR 87h:35342] [53 citations]
- 6. (with William Rundell) "Undetermined Coefficient Problems for Nonlinear Elliptic and Parabolic Equations," I.S.N.M. 77, pp. 139-154, 1987. [MR 88i:35175] [14 citations]
- 7. (with William Rundell) "An Inverse Problem for an Nonlinear Elliptic Equation," SIAM Journal of Analysis, v. 18, n. 6, pp 1801-1809, 1987. [MR 88k:35216] [23 citations]
- 8. (with William Rundell) "Iteration Schemes for Unknown Coefficient Problems Arising in Parabolic Equations," Numerical Methods for Partial Differential Equations. v. 3, pp. 313-325, 1987. [not in MR] [12 citations]
- 9. (with William Rundell) "A uniqueness theorem for determining conductivity from overspecified boundary data," Journal of Math. Anal. Appl., v. 136, n. 1, pp. 20-28, 1988. [MR 90a:35226] [12 citations]
- 10. (with William Rundell) "An iteration method for the determination of an unknown boundary condition in a parabolic initial-boundary value problem," Proc. Edin. Math. Soc., v. 32, pp. 59-71, 1989. [MR 90d:35292] [12 citations]
- 11. (with William Rundell) "Fixed point methods for a nonlinear parabolic inverse problem," Comm. P.D.E., v. 13, n. 4, pp. 469-493, 1988. [MR 89a:35225] [35 citations]
- 12. (with William Rundell) "Multiple undetermined coefficient problems for quasi-linear parabolic equations," Num. Methods in P. D. E., v. 5, pp. 297-311, 1989. [MR 92c:65154] [1 citation]
- 13. (with W. Rundell) "Recovery of an Unknown Specific Heat by Means of Overposed Data," Num. Methods in P. D. E., v. 6, pp. 1-16, 1990. [MR 91d:65205] [1 citation]
- 14. (with William Rundell) "Determining the initial age distribution for an age structured population," Mathematical Population Studies, v. 3, n. 1, pp. 3-20, 1991. [11 citations]
- 15. (with William Rundell) "Determining a coefficient in a first order hyperbolic equation," SIAM Journal Applied Math. v. 51, n. 2, pp. 494-506, 1991. [MR 91m:35242] [22 citations]
- 16. (with William Rundell) "A method for identifying nonlinear terms in parabolic initial

- boundary value problems," *Advances in Water Resources*, v. 14., n. 2, pp. 83-88, 1991. Computational Mechanics Publications. [MR 92b:35170] [3 citations]
- 17. (with William Rundell) "Undetermined Coefficient Problems for Quasilinear Parabolic Equations," Inverse Problems in Partial Differential Equations, pp. 165-185, SIAM 1990. [MR 91e:35216] [7 citations]
- 18. (with William Rundell) "Age-structured population dynamics," in *Inverse Methods in Action*, pp. 122-129, P. Sabatier, editor, Springer Verlag, 1990. [1 citation]
- 19. (with Bruce Lowe and William Rundell) "The recovery of potentials from finite spectral data," SIAM J. of Math. Anal., v. 23, n. 2, pp. 482-504, 1992. [46 citations]
- 20. (with R.E. Ewing, J.G. Wade, A.T. Watson), "Estimating Parameters in Scientific Computation: A Survey of Experience from Oil and Groundwater Modeling," *IEEE Computational Science and Engineering*, pp. 19–31, Fall 1994. [16 citations]
- 21. (with R.E. Ewing, J.G. Wade, A.T. Watson), "Identification and Control Problems in Petroleum and Groundwater Modeling." *Control Problems in Industry.* Birkhauser Boston, pp. 119-149, 1995. [9 citations]
- 22. (with Ko, J. and Kurdila, A.J.), "A Class of Finite Element Methods Based on Orthonormal Compactly Supported Wavelets," *Computational Mechanics. Solids, Fluids, Fracture, Transport Phenomena, Multi-Body Dynamics and Variational Methods*," v. 16, n. 4, pp 235-244, 1995. [73 citations]
- 23. (with J. Ko and A. Kurdila), "Triangular Wavelet-Based Finite Elements via Multivalued Scaling Equations," *Computer Methods in Applied Mechanics and Engineering*, v. 146, pp 1–17, 1997. [15 citations]
- 24. (with M. Rowe et al), "Determining the age of Qatari Jabal Jassassiyah Petroglyphs," *QScience Connect*, 2012. [1 citation]
- 25. (with S. Nite et al.), "A bridge to engineering: A personalized precalculus (bridge) program." 2015 IEEE Frontiers in Education Conference Proceedings, 2015.

8.2 Submitted

1. "Quantifying Uncetertainty for an Elliptic Inverse Problem with Finite Data," with Liu, J. Submitted to *Inverse Problems*.

8.3 In Preparation

1. "Quantifying Uncetertainty for a Parabolic Inverse Problem with Finite Interior Data," with Liu, J.

8.4 Refereed Conference Proceedings

- 1. (with William Rundell) "A collocation scheme for the identification of coefficients in nonlinear parabolic equations," *Proceedings of the 28th IEEE Conference on Decision and Control*, 1989.
- 2. (with William Rundell) "Identification of nonlinear flux terms in a parabolic initial-boundary value problem," Krueger Conf. Proc., Albuquerque, 1990.

- 3. Ko, J., Kurdila, A.J., and Pilant, M.P., "A class of wavelet-based finite element methods for computational mechanics." Multigrid Methods," *presented at the 35th Structures, Structural Dynamics and Materials Conference*, Hilton Head, South Carolina, May, 1994. [13 citations]
- 4. J. L. Schnase. et. al, "The CoLib Project: Enabling Digital Botany for the 21st Century," Proceedings of the Conference on Digital Libraries, vol. 94, pp 106-118, 1994. [17 citations]
- 5. R. Ewing, A.J. Kurdila, and M. Pilant, "Multiresolution Analysis of Partial Differential Equations on Irregular Domains," *Proceedings of the Society of Engineering Science 31st Annual Technical Meeting*, Texas A&M University, College Station, Texas, October 10-12, 1994.
- 6. J. Ko, A. J. Kurdila, and M. Pilant, "Wavelet Galerkin Multigrid Methods." 35th AIAAASMEASCEAHSASC Structures, Structural Dynamics, and Materials Conference. Part 1 (of 5). pp. 224-234, 1994.
- 7. (with R.E. Ewing, J.G. Wade, A.T. Watson), "Identification and Control Problems in Petroleum and Groundwater Modeling," Proceedings of the SIAM Symposium on Control Problems in Industry, 1994 Annual meeting, *Birkhaüser*, 28 pages.
- 8. J. Ko, A.J. Kurdila, and M. Pilant, "Triangular Wavelet-Basaed Finite Elements via Multivalued Scaling Functions," *Proceedings of the 36th Structures, Structural Dynamics, and Materials Conference*, New Orleans, LA, April 10-13, 1995.
- 9. M. S. Pilant, "Parameter Estimation Issues for Flow in Porous Media with Multiple Lengh Scales", *Next Generation Environmental Models and Computational Methods: Proceedings*, vol 87, p. 329. 1997.
- 10. (with Hall, Robert and Strader, Arlen), "The Impact of Web-Based Instruction on Performance in an Applied Statistics Course," *International Conference on Mathematics/Science Education and Technology 1999 Conference Proceedings*, pp 261-266, 1999. [11 citations]
- 11. (with R. Hall, J. Epstein, Y. Hester, and R. A. Strader), "Issues Involved in a Large Scale Implementation of Web-Based Mathematics Instruction," *International Conference on Mathematics/Science Education and Technology 2000 Conference Proceedings*, pp. 334-339, 2000. [5 citations]
- 12. (with Hall, Robert; Strader, Arlen), "Cognitive Design of Instructional Databases," *Society for Information Technology and Teacher Education Proceedings*, pp 1167-1172, 2001.
- 13. (with Allen, Don) "The Distance Education Degree Program for The Master of Mathematics with a Teaching Option at Texas A&M University," *Society for Information Technology and Teacher Education Proceedings*, pp 111-116, 2001. [1 citation]
- 14. (with Strader, Arlen; and Hall, Robert) "Assessing Student Statistical Problem-Solving Skills using Interactive Java Applets," *Society for Information Technology and Teacher Education Proceedings*, pp. 1196-1197, 2001.
- 15. "Applied Calculus on the Web Applets and Applications", *International Conference on Technology in Collegiate Mathematics Proceedings*, 2001.
- 16. (with D. Allen) "Developing an Online Master's Program Problems and Successes," *DEC 2003 Tenth Annual Distance Education Conference*, Jan. 21-24, 2003, Austin, TX.

- 17. (with J. Epstein) "Finite Math on the Web Core Mathematics Delivered via the Web," *International Conference on Technology in Collegiate Mathematics*, 2003.
- 18. (with D. Allen) "Developing an Online Master's Program Problems and Successes", *DEC 2003 Tenth Annual Distance Education Conference*, Jan. 21-24, 2003, Austin, TX.
- 19. "Comprehensive Statistical Analysis of a Mathematics Placement Test," with Robert J. Hall and Eunju Jung. To appear in the Proceedings of the Society for Information Technology and Teacher Education (SITE) 23rd International Conference, Austin, TX, March 5-9. pp. 4432-4439, 2012.
- 20. "A bridge to engineering: A personalized precalculus (bridge) program," with Nite, S. B., Morgan, J., Allen, G. D., Capraro, R. M., Capraro, M. M. 2015 IEEE Frontiers in Education Conference Proceedings, pp. 2053-2058.

8.5 Technical Reports:

- 1. Höllig, K., and Pilant, M. S., "Regularity of the Free Boundary For the One-Dimensional Porous Medium Equation," Center for Approximation Theory (CAT) Report # 46, Texas A&M University
- 2. Höllig, K., and Pilant, M. S., "Regularity of the Free Boundary for the Porous Medium Equation," University of Wisconsin Math Research Center (MRC) Report # 2742
- 3. "Galerkin Approximations to Equations of Mixed Type," (C.A.T. report #73)
- 4. "Analysis of a Thermoviscoplastic Uniaxial Rod Under Prescribed Stress. Part I Theoretical Development," Mechanics and Materials Center (MMC) Report MM-4875-85-2, TexasA& M University
- 5. "Analysis of a Thermoviscoplastic Uniaxial Rod Under Prescribed Stress. Part II Boundary Layer and Asymptotic Analysis." (MMC Report MM-4875-85-6)
- "Numerical Results for a Thermoviscoplastic Uniaxial Bar Under Prescribed Stress. Part III - Numerical Results for a Bar with Radiative Boundary Conditions," (MMC Report MM-4875-85-10)
- 7. "A One-Dimensional Model for Predicting Thermomechanical Response of an Inelastic Uniaxial Bar to High Thermal Inputs" in preparation.
- 8. "Experimental and Theoretical Determination of Thermomechanical Response of Inelastic Structural Materials to High Energy Thermal Inputs" First Annual Technical Report, (MM 5485-87-7).
- 9. "Experimental and Theoretical Determination of Thermomechanical Response of Inelastic Structural Materials to High Energy Thermal Inputs" Semi-Annual Technical Report, (MM 5485-87-24).
- "Experimental and Theoretical Determination of Thermomechanical Response of Inelastic Structural Materials to High Energy Thermal Inputs" Second Annual Technical Report, (MM 5485-88-5).
- 11. "Experimental and Theoretical Determination of Thermomechanical Response of Inelastic Structural Materials to High Energy Thermal Inputs" Final Technical Report, (CMC 5485-90-1).

8.6 Books

- (with Bollinger, Kathryn; Epstein, Janice; Hall, Robert; Hester, Yvette; Strader, Arlen). "Finite Math on the Web," *Brooks Cole/Thompson Learning*, 1st edition, 2001, 250 pp, with Student CDROM containing 4 Java applets, 30 minutes of streaming video, and extensive solutions sets. http://www.finitemathtutor.com - official web site.
- 2. (with Bollinger, Kathryn; Epstein, Janice; Hall, Robert; Hester, Yvette; Strader, Arlen). "Finite Math on the Web," *Brooks Cole/Thompson Learning*, 2nd edition, 2005
- 3. (with Bollinger, Kathryn; Epstein, Janice; Hall, Robert; Hester, Yvette; Strader, Arlen). "Finite Math on the Web," *Brooks Cole/Thompson Learning*, 3rd edition, 2007
- 4. (with Bollinger, Kathryn; Epstein, Janice; Kiffe, Tom; Whitfield, Jennifer), "Applied Calculus Online," *Brooks Cole/Thompson Learning*, electronic edition, 2006.

8.7 Other

- 1. "Mathematics," Major subject article for the Microsoft Encarta 2000 Encyclopedia CDROM.
- 2. "Mathematics," 5000 word article for Microsoft Encarta 2003 Encyclopedia (revised).

9 CONFERENCE PRESENTATIONS

- 1. "The Free Boundary Problem for the One-Dimensional Porous Medium Equation" Texas P.D.E. Seminar, Southwest Texas State University, 1984.
- 2. "Regularity and Convergence Results for a Galerkin Approximation of the One-Dimensional Porous Medium Equation" presented at the SIAM/SPE/SEG Conference, Houston, Jan. 1985.
- 3. "Galerkin Methods for Equations of Non-Fixed Type," Texas P.D.E. Seminar, University of Houston, 1985.
- 4. "Asymptotic Behavior of a Thermoviscoplastic Material under Cyclic Loading," SIAM National Meeting, Pittsburgh, June 1985.
- 5. "Time Dependent Behavior of a Thermoviscoplastic Uniaxial Rod," Tenth U.S. National Congress of Applied Mathematics, U. T. Austin, June 16-20, 1986.
- "A Survey of Recent Results in Inverse Coefficient Problems," Combined Midwest-Southeast Differential Equations Conference, Vanderbilt University, October 23-24, 1987.
- 7. "Using Domain Decomposition Methods for Computing Singularities of Equations of Mixed Type," SIAM Conference on Domain Decomposition Methods, Houston, March 20-22, 1989. [Chaired session.]
- 8. "Survey of Methods for Inverse Coefficient Problems", AMS Summer Conference, Arcata 1989.

- 9. "On the Formal Equivalence of Certain Multidimensional, Finite Data Inverse Problems," Texas P.D.E. Conference, TAMU, 1993.
- 10. Chaired Special Session on Scientific Computing, Texas Section, MAA, Annual Meeting, April 8, 1994.
- 11. Ko, J., Kurdila, A.J., and Pilant, M.P., "Wavelet Galerkin Multigrid Methods," *presented at the 35th Structures, Structural Dynamics and Materials Conference*, Hilton Head, South Carolina, May, 1994.
- 12. Ko, J., Kurdila, A.J., and Pilant, M.P., "A Class of Wavelet-based Finite Elements for Computational Mechanics," *presented at the 35th Structures, Structural Dynamics and Materials Conference*, Hilton Head, South Carolina, May, 1994.
- 13. M. S. Pilant, "Multi-scale Parameter Estimation Techniques for Flow in Porous Media", SIAM 45th Anniversary Conference, Albuquerque, New Mexico, June 17, 1997. [30 minute invited minisymposium talk]
- 14. M. S. Pilant, "Identifying Parameters In Large Complex Systems, A Marriage of Mathematical Analysis and Computation," AAAS 73d Annual Meeting, Southwestern and Rocky Mountain Division, May 22, 1997. [20 minute talk]
- 15. (with R. Hall, J. Epstein, Y. Hester, and R. A. Strader), "Issues Involved in a Large Scale Implementation of Web-Based Mathematics Instruction," International Conference on Mathematics/Science Education and Technology 2000 Conference Proceedings, Feb 5-8, 2000. [30 minute talk]
- 16. (with Hall, Robert; Strader, Arlen), "Cognitive Design of Instructional Databases," *Society for Information Technology and Teacher Education* 2001
- 17. "Applied Calculus on the Web Applets and Applications", *International Conference on Technology in Collegiate Mathematics*, 2001.
- 18. (with Epstein, Janice) "Finite Math on the Web Core Mathematics Delivered Via the Web" *International Conference on Technology in Collegiate Mathematics*, 2003.
- 19. "Parameter Estimation and Modeling in Nonlinear Systems," First Annual Doha Conference on Applied Mathematics and Computational Science, Doha, Qatar, May 20-22, 2007.

10 WORKSHOPS

- 1. "Multimedia Workshop" [Invited Presentation], 90 min, ICTCM, Baltimore, Maryland, Nov. 1-4, 2001.
- 2. ICTCM Short Course [3 day], Phoenix AZ, May 20-24, 2002.
- 3. ICTCM/MAA Short Course [3 day], Burlington, VT, July 28-31, 2002.
- 4. "Tech Toys Technology in Education," [Pre-Conference Workshop] ICTCM, Orlando, Oct. 31-Nov 2, 2002.
- 5. ITCM Workshop, ICTCM National Meeting, Chicago IL, March 11-14, 2010
- 6. ICTCM Workshop, Denver CO, March 17-20, 2011.
- 7. ICTCM Workshop, Orlando FL, March 22-25, 2012.
- 8. ICTCM Workshop, San Antonio, TX, March 20-22, 2014.

11 PANELS

- 1. "The Role of Assessment in Online Instruction," SITE, 2001.
- 2. "Online Testing", part of Creating Online Assessments, ICTCM, 2001.

12 INVITED LECTURES

- 1. "Methods in Nonlinear Partial Differential Equations" presented at the Texas Institute for Computational Mechanics (TICOM), U.T. at Austin, Aug. 1984
- 2. "Hodograph and Galerkin methods in Nonlinear Partial Differential Equations" TICOM, Nov. 1984
- 3. "Survey of Methods for Inverse Coefficient Problems", one hour survey talk, AMS Summer Conference, Arcata 1989.
- 4. "Parallel algorithms for an Inverse Sturm-Liouville Problem," 20 minute invited address, AMS Meeting, Portland, OR., June 1991.
- 5. "Wavelet Galerkin Methods," University of South Carolina, April 20, 1994.
- 6. "Parallel Navigation and Visualization Tools," University of South Carolina, April 21, 1994.
- 7. "Scale-up in Multiphase Flow: Nonlinearity, Heterogeneity, or Anisotropy?," Characterizing Multiphase Flow in Porous Media, April 20, 1995.
- 8. M. S. Pilant, "Parameter Estimation Issues for Flow in Porous Media", *presented at 1995 NGEMCOM conference*, EPA Supercomputing Facility, Bay City, Michigan, August, 1995.

13 OTHER PRESENTATIONS

- 1. "High Performance Computing and Scientific Visualization," to Congressman Jack Fields, at Texas A&M University, April 25, 1995.
- 2. "Inverse Problems and Parameter Estimation," on the occasion of the 50th birthday of Richard E. Ewing, November 20, 1996
- 3. "Retention through Remedication," Poster Session. NSF-STEP meeting, Washington, D.C. March 3-5, 2010.
- 4. "Research opportunities," Lynnetech site vist, Dec 3, 2010.

14 RESEARCH

14.1 Research Funding:

1. Faculty Investigator, A.F.O.S.R. Grant # F49620-83-C-0067, "A Model for Predicting Thermomechanical Response of Large Space Structures" Co-PI's - D. H. Allen,

- W. Haisler, Aerospace Engineering Department, Texas A&M University. Funding for Summer 1984 and Summer 1985.
- 2. Co-PI, A.F.O.S.R. Grant # F49620-86-K-0016, "Experimental and Theoretical Determination of Thermomechanical Response of Inelastic Structural Materials to High Energy Thermal Inputs" 6-01-86 thru 9-30-89, Funding amount \$358,660.
- 3. Co-PI, National Science Foundation Grant #DMS-870-1338, "Determination of Nonlinear Terms in Parabolic and Elliptic Partial Differential Equations From Overposed Data" with W. Rundell, \$48,000, jointly funded with Air Force Office of Scientific Research. 6-87 through 5-89. (received two 6 month budget extensions)
- 4. CO-PI, Office of Naval Research Grant #ONR N00014-89-J-1008, "Undetermined coefficient problems for quasi-linear parabolic equations," with W. Rundell, \$176,125, 1-89 through 12-91.
- 5. CO-PI, National Science Foundation, #DMS-890-1763, "Various Problems Concerning the Recovery of Unknown Coefficients in Differential Equations," with W. Rundell, \$90,800, 9-89 through 5-92. Support for 2 graduate students.
- 6. CO-PI, NSF-#8804590 (SCREMS), \$45,000, "Mathematical Sciences Research Equipment." with W. Rundell.
- 7. CO-PI, NSF-#9103519 (SCREMS), "Mathematical Sciences Research Scientist," with W. Rundell, G. Chen, J. Zhou, P. Stiller, \$49,000, with \$25,000 matching funds, for support of scientific programmer and system manager.
- 8. Co-PI, "Multidimensional Reconstruction Methods for Inverse Problems," #DMS-920-2352, \$162,531, 6-1-92 thru 5-31-95. Funded by NSF-DMS.
- 9. Co-PI, "Partnership in Computational Sciences," Dept. of Energy, DE-FG05-92ER25143, \$2,480,000, Jan. 1992- Dec. 1994.
- 10. Investigator, "Wavelet Galerkin Methods in Computational Mechanics," NASA-Langley, \$17,000, \$43,806 supplement. 10/1/93 9/31/96
- 11. Investigator, "Wavelet Galerkin Methods and Multiresolution Methods in Computational Mechanics," ATP Program Texas Coordinating Board, \$ 169,648, Jan 1, 1994 Jan, 1 1996.
- 12. Investigator, "Wavelet Galerkin Methods and for the Solution of Partial Differential Equations on Irregular Domains," ARP Program Texas Coordinating Board, \$20,222. Jan 1, 1994 Jan, 1 1996.
- 13. Co-PI, "Partnership in Computational Science," Dept. of Energy, DOE-32550-4130F, \$127,000, Jan 1, 1995 Sept. 30, 1995.
- 14. Co-PI, "Partnership in Computational Science," Dept. of Energy, \$475,000, July 15, 1995 Feb. 29, 1996.
- 15. Co-PI, "Planning Grant for a Center for Collaborative Research on Learning Technologies," NSF #9616500, \$50,000, 12/1/96 7/15/97.
- 16. PI, "Phase I ATSI/TAMU Academy Skills Factory", American Training and Skills Institute (ATSI) subcontract, \$48,000.
- 17. Co-PI, "Intelligent Tutoring Systems", Brooks AFB, \$408,000, 6/1/97 12/31/98.
- 18. PI, Brooks-Cole Publishing Co, "Finite Math on the Web©," \$130,000, 9/1/97 8/31/01.
- 19. PI, Brooks-Cole Publishing Co, "Applied Calculus on the Web©," \$130,000, 9/1/02 8/31/05.

- 20. Co-PI, "BIOCOMPLEXITY, Incubation Activity: Application of Mathematical Methods and Scientific Computation to Complex Ecological Problems," NSF-#0083894, \$96,918. 9/2000-8/2003
- 21. Co-PI, "TAMU STEPS: Retention Through an Applied Physics, Engineering, and Mathematics (PEM) Model," NSF-#0336591, \$2,000,000. 9/2003-5/2008.
- 22. PI, "Development of a Computational Groundwater Model for Qatar," NPRP-26-6-7-8, \$720,242. 2009-2011.
- 23. Co-PI, "Retention through Remediation: Enhancing Calculus I Success," NSF-DUE#0856767, \$1,148,887. 2009-2012. No-cost extensions thru 2016.
- 24. PI, "Math Virtual Learning Center [MVLC]" Provost funds, \$100,000 per year for 3 years 2016-2019.

14.2 Equipment Funding

- Co-PI, "Mathematical Sciences Research Equipment" NSF-SCREMS #DMS-8604640, funded June 1, 1986, for purposes of obtaining a high resolution color graphics workstation and supporting equipment. Funding amount \$49,500 with \$33,000 matching funds. (Purchased an Silicon Valley Graphics IRIS 3130 Color Graphics Workstation with peripherals.)
- 2. CO-PI, "Mathematical Sciences Research Equipment", NSF-SCREMS #DMS-8804590, \$45,000 with \$45,000 matching funds from Texas A&M University. (Purchased a MIPS 2000 RISC architecture superminicomputer, workstations, and peripherals).
- CO-PI, NSF-Infrastructure Equipment Proposal, "Acquisition of Instrumentation and Computational Equipment for the Experimental Laboratory," Electrical Engineering Dept., \$415,710
- 4. CO-PI, NSF, "Acquisition of Network Infrastructure to Support Engineering and Science Research and Research Training in the Texas A&M University ATM Testbed," \$393,000, 7/1/97 6/30/99.
- 5. PI, TAMU Electronic Learning Incentives Program, \$5000, for purchase of a dual procession pentium server to build a digital library for science and mathematics, 1997. This is found at http://smartlib.tamu.edu/
- 6. PI, "College of Science Information Technology Laboratory," \$50,000 for startup. \$20,000 yearly for maintenance, support and upgrades.

14.3 Funded Conferences

- 1. CO-PI, National Science Foundation, Office of Naval Research, Air Force Office of Scientific Research, Grant #DMS-9015637, "Inverse Problems Computational Algorithms" an international conference held at Texas A&M University March 10-14, 1991. \$21,000.00 with \$9,000 matching funds.
- 2. Organizer, First Annual Doha Conference on Applied Mathematics and Computational Science, International Conference held at Texas A&M University at Qatar, in Doha, Qatar, May, 2007. Groundwater as a Main Water Source for Agriculture in Qatar, \$30,000.00 with supplemental funding by the Ministry of Municipal

Affairs and Agriculture, and the Office of the Vice President for Research, Texas A&M University.

[URL: http://people.qatar.tamu.edu/michael-pilant/Conference_2007/]

- 3. Organizer, **Second Annual Doha Conference on Applied Mathematics and Computational Science**, International Conference held at Texas A&M University at Qatar, in Doha, Qatar, May, 2008. \$20,000.00 from Texas A&M University at Qatar. [URL: http://people.qatar.tamu.edu/michael-pilant/MathConference/]
- Organizer, CMCS 2009: International Conference on Modeling of Complex Systems, International Conference held at Texas A&M University at Qatar, in Doha, Qatar, May, 2009. \$20,000.00 from TAMUQ.

 [URL: http://www.qatar.cmu.edu/cmcs09/]

14.4 Pedagogical Awards

- 1. Texas A&M University Association of Former Students Incentive Grant, \$1,000, August 1989.
- 2. Texas A&M University Honors Curriculum Development Grant, \$2,000, May 1991.
- 3. Texas A&M University Association of Former Students Incentive Grant, \$1,500, July 1991.
- 4. \$50,000, Investigator, "Reinforcing Core-Concept Ideas in the Calculus Sequence," TAMU Interdisciplinary Research Initiatives Award, Sept 1993.
- 5. \$2,500, TEES Undergraduate Research Advisor to Loyal G. Bassett II, "Design and Implementation of Distributed Graphics Protocols with Compression," Summer 1993.
- 6. \$5,000, College of Science Research Enhancement Grant, Oct. 1993.
- 7. \$25,000, "Development of an Interactive Learning Environment for Engineering Calculus," TAMU Interdisciplinary Research Initiatives Award, April 1995.
- 8. \$4078, "Web Templates for Business Mathematics," Electronic Learning Incentives Program (ELIP), 1998.
- 9. \$8400, "Assessment Tools for Web-Based Instruction at Texas A&M University," Electronic Learning Incentives Program (ELIP), 1998.
- 10. \$150,000, "Development of a Distance Masters Degree in Mathematics with Teaching Option," Provost, 5/99 12/00.
- 11. \$100,000, "Masters in Computational Mathematics," Provost, 2005-present.

14.5 Other Funding

1. College of Science Summer Research Grant, Summer 1984

14.6 Development

- 1. Frito-Lay R&D, February 1994.
- 2. University Associates, Spring 1994
- 3. Hearing Research Planning Meeting, Jan. 1994. (Math, EE)
- 4. College of Science Development Council meetings

14.7 Centers and Institutes

- 1. Institute for Scientific Computation (ISC), 1992, with Richard E. Ewing.
- 2. Cognitive and Instructional Technologies Laboratory (CITL), with Robert Hall and Andrew Stricker.
- 3. College of Science Information Technology Lab, with Don Allen.
- 4. Information Technology Working Group (ITWG) with Don Allen
- 5. Center for Technology-Mediated Learning in Mathematics, with Don Allen.

14.8 Software and Courseware

- 1. Math Placement Exam (MPE). Placement exam, taken by all entering TAMU freshman. Authored by Amy Austin, Marcia Drost. Assisted in development and analysis.
- 2. Finite Math on the Web. A series of online modules, developed for Math 141. Funded by Brooks-Cole Publishing (Thomson Corp.)
- 3. Applied Calculus on the Web. A series of online modules, developed for Math 142. Funded by Brooks-Cole Publishing (Thomson Corp.)
- 4. Masters in Mathematics, Distance Education Program, teaching option.
- 5. Masters in Mathematics, Distance Education Program, computational option.
- 6. Online Testing, with Robert Hall and Arlen Strader. In use in the College of Education.

14.9 Online Courses

- 1. http://www.math.tamu.edu/ mpilant/math602/
- 2. http://www.math.tamu.edu/mpilant/math609/
- 3. http://www.math.tamu.edu/ mpilant/math610/
- 4. http://www.math.tamu.edu/ mpilant/math614/
- 5. http://www.math.tamu.edu/ mpilant/math629/
- 6. http://www.math.tamu.edu/ mpilant/math640/
- 7. http://www.math.tamu.edu/ mpilant/math646/
- 8. http://www.math.tamu.edu/mpilant/math647/
- 9. http://www.math.tamu.edu/mpilant/math660/
- 10. http://www.math.tamu.edu/ mpilant/math666/
- 11. http://www.math.tamu.edu/mpilant/math666-new/

15 TEACHING

16 STUDENTS

16.1 Completed

- (i) Undergraduate Honors Theses.
 - (i) Robert Newberry, "Design, Implementation and Initial Testing of an On-Line Mathematics Curriculum." Spring 1992
 - (ii) Johnny Chen and Loyal Bassett, II, "Parallel Algorithms for Compression and Transmission of Complex Images: Applications to Interactive Scientific Visualization," May 1994.
- (ii) Master's Students (chair)
 - (i) Arlen Strader, December 1996, "Hybrid Wavelet-Finite Element Algorithms," M.S. Mathematics, Chair.
 - (ii) David Eberle, May 2001, "Numerical Techniques for Rigid Body Simulation," M.S. Mathematics
 - (iii) Stephen Badgley, August 2016, M.S. Mathematics (non-thesis)
 - (iv) Nolan DeMent, December 2015, M.S. Mathematics (non-thesis)
 - (v) Jeffrey Cagle, May 2015, M.S. Mathematics (non-thesis)
 - (vi) Haley Whisenhunt, August 2014, M.S. Mathematics (non-thesis)
 - (vii) Joel Ward, May 2014, M.S. Mathematics (non-thesis)
 - (viii) Kristan Hemingway, December 2013, M.S. Mathematics (non-thesis)
 - (ix) Yu Shi, December 2013, M.S. Mathematics (non-thesis)
 - (x) Eric Thompson, December 2013, M.S. Mathematics (non-thesis)
 - (xi) Marty Kellum, August 2012, M.S. Mathematics (non-thesis)
 - (xii) David Kincaid, December 2011, M.S. Mathematics (non-thesis)
 - (xiii) John Cathcart, May 2010, M.S. Mathematics (non-thesis)
 - (xiv) Chad Musick, May 2010, M.S. Mathematics (non-thesis)
- (iii) Ph.D. Students (chair or co-chair)
 - (i) Young Sook Kim, "Numerical Methods for Equations of Mixed Type," May 1990, Texas A&M University.
 - (ii) Lester Caudill, "Identification and Reconstruction of Potentials in Two Space Dimensions," May 1992, Texas A&M University.
 - (iii) Yan Zheng, "Multi-Scale Parameter Estimation for the Steady State Diffusion Equation," August 1997, Texas A&M University.
 - (iv) Jiayin Liu, "Quantifying Uncertainty for an Elliptic Inverse Problem with Finite Data," August 2015, Texas A&M University.

16.2 Current:

- (i) Master's Students, Distance
 - (i) Nicholas Valletta (chair)

- (ii) Cynthia Galvan (chair)
- (iii) Mark Chapman (chair)
- (iv) Konstantin Krassavine (chair)
- (v) Trey Braband
- (vi) Teri St. Pierre
- (vii) Jill Bell
- (viii) Emily Shives
- (ix) Ashley Wiley
- (x) Brian Beamer
- (xi) Abby Wiatrek
- (xii) Henry Stanfield
- (xiii) Jay Clawson
- (xiv) Craig Sullivan
- (xv) Courtney Eby (member, Ed. Psych)
- (xvi) Jay Ordway
- (xvii) Julie Sarzynski
- (xviii) John Osborn
- (xix) Rebekah Zimmerman
- (xx) Vennela Gudupuri
- (xxi) Jesse Laeuchli
- (xxii) William Beman
- (xxiii) Stephanie Nite
- (xxiv) Ebru Ozbay
- (xxv) Evan Fisher
- (xxvi) Alexander Munson
- (xxvii) George Abbot
- (xxviii) Anupam Aggarwal
- (xxix) Sylvia San Pedro
- (xxx) William Chad Beaman
- (xxxi) Paula Whitman
- (xxxii) Rebecca Moch
- (xxxiii) Richard Frederick
- (xxxiv) Pamela Kimbrough
- (xxxv) Heather Bergman
- (xxxvi) Richard Enderton
- (ii) Master's Students, Thesis.
 - (i) Sandeep Parmekar, M.S. Mathematics, Chair, inactive.
- (iii) Ph.D. Students
 - (i) Craig McIntyre, "Inverse Problems for Population Models," Ph.D. Mathematics, Co-Chair, inactive.
 - (ii) SeongSoo Kim, committee
 - (iii) Thomas Oliver, committee
 - (iv) Jianchao Ge, committee

- (v) Mohamed El-Nozahi, committee
- (vi) Zhiying Hai, committee

17 POSTDOCTORAL RESEARCHERS

1. J. G. Wade, 1992-1993

18 COURSES

18.1 2016

- 1. Spring 2017, Math 308.510, 55 students
- 2. Spring 2017, Math 660.700, 17 students

18.2 2016

- 1. Fall 2016, Math 647.700, 14 students
- 2. Summer 2016, Math 696.700, 23 students
- 3. Spring 2016, Math 308.201, 25 students

18.3 2015

- 1. Fall 2015, Math 308.512, 52 students
- 2. Fall 2015, Math 308.515, 47 students
- 3. Summer 2015, Math 696.700, 12 students
- 4. Summer 2015, Math 696.720, 12 students
- 5. Spring 2015, Math 614.700, 5 students
- 6. Spring 2015, Math 614.720, 6 students

18.4 2014

- 1. Fall 2014, Math 308.510, 55 students
- 2. Fall 2014, Math 308.511, 53 students
- 3. Summer 2014, Math 696.700, 10 students
- 4. Summer 2014, Math 696.720, 9 students
- 5. Spring 2014, Math 442.500, 14 students
- 6. Spring 2014, Math 442.930, 7 students

18.5 2013

- 1. Fall 2013, Math 167.501, 95 students, 2.524 GPR
- 2. Fall 2013, Math 167.604, 92 students, 2.288 GPR
- 3. Summer 2013, Math 696.700, 10 students, 4.000 GPR

- 4. Summer 2013, Math 696.720, 9 students, 3.889 GPR
- 5. Spring 2013, Math 646.720, 8 students, 3.875 GPR
- 6. Spring 2013, Math 614.699, 5 students, 4.000 GPR
- 7. Spring 2013, Math 614.700, 5 students, 4.000 GPR
- 8. Spring 2013, Math 614.720, 5 students, 4.000 GPR

18.6 2012

- 1. Fall 2012, Math 640.700, 9 students, 3.889 GPR
- 2. Fall 2012, Math 640.720, 12 students, 3.667 GPR
- 3. Summer 2012, Math 696.700, 7 students, 3.930 GPR
- 4. Summer 2012, Math 696.720, 12 students, 4.00 GPR
- 5. Spring 2012, Math 602.602, 30 students, 3.500 GPR

18.7 2011

- 1. Fall 2011, Math 171.502, 29 students, 2.379 GPR
- 2. Fall 2011, Math 609.720, 7 students, 3.714 GPR
- 3. Fall 2011, Math 685.720. 1 student, 3.0 GPR
- 4. Summer 2011, Math 696.700, 7 students, 4.0 GPR
- 5. Summer 2011, Math 696.720, 6 students, 4.0 GPR
- 6. Spring 2011, Math 646.720, 10 students, 3.9 GPR

18.8 2010

- 1. Fall 2010, Math 308.513, 48 students, 2.625 GPR
- 2. Summer 2010, Math 696.700, 8 students, 4.0 GPR
- 3. Summer 2010, Math 696.720, 10 students, 3.9 GPR
- 4. Spring 2010, Math 609.700, 1 student, 4.0 GPR
- 5. Spring 2010, Math 609.720, 7 students, 3.857 GPR

18.9 2009

- 1. Fall 2009, Math 304.503, 43 students, GPR 2.977
- 2. Fall 2009, Math 304.504, 42 students, GPR 2.286
- 3. Summer 2009, Math 696.700, 10 students, GPR 4.0
- 4. Summer 2009, Math 696.720, 12 students, GPR 3.917
- 5. Spring 2009, Math 614.700 11 students, GPR 3.273
- 6. Spring 2009, Math 614.720, 15 students, GPR 3.400

18.10 2008

- 1. Fall 2008, Math 171.505, 25 students, GPR 1.840
- 2. Fall 2008, Math 442.500, 18 students, 2.889
- 3. Summer 2008, Math 696.700, 6 students, GPR 3.833

- 4. Summer 2008, Math 696.720, 9 students, GPR 4.0
- 5. Spring 2008, Math 442.500, 20 students, GPR 3.10

18.11 2007

- 1. Fall 2007, Math 647.700, 4 students, GPR 3.50
- 2. Qatar Fall 2007, Math 414.501, 11 students, GPR 3.545

18.12 2006

1. Qatar - Fall 2006, Math 311.501, 15 students, GPR 2.214

18.13 2005

- 1. Summer 2005, Math 696.100, 6 students, GPR 4.0
- 2. Summer 2005, Math 696.700, 11 students, GPR 3.909
- 3. Spring 2005, Math 629.700, 17 students, GPR 3.882

18.14 2004

- 1. Summer 2004, Math 696.200, 18 students, 3.833 GPR
- 2. Summer 2004, Math 696.700, 16 students, 3.929 GPR
- 3. Spring 2004, Math 614.600, 15 students, 3.733 GPR
- 4. Spring 2004, Math 614.700, 8 students, 2.667 GPR

18.15 2003

- 1. Summer 2003, Math 696.200, 18 students, 4.000 GPR
- 2. Summer 2003, Math 696.700, 21 students, 4.000 GPR
- 3. Spring 2003, Math 646.600, 7 students, 3.667 GPR
- 4. Spring 2003, Math 646.700, 12 students, 3.727 GPR

18.16 2002

- 1. Fall 2002, Math 308.502, 52 students, 2.239 GPR
- 2. Fall 2002, Math 696.600, 4 students, 4.000 GPR
- 3. Summer 2002, Math 696.200, 14 students, 4.000 GPR
- 4. Summer 2002, Math 696.700, 10 students, 3.900 GPR
- 5. Spring 2002, Math 308.200, 20 students, 3.450 GPR

18.17 2001

- 1. Fall 2001, Math 304.502, 36 students, 2.514 GPR
- 2. Summer 2001, Math 696.200, 7 students, 4.000 GPR
- 3. Summer 2001, Math 696.700, 5 students, 4.000 GPR

- 4. Spring 2001, Math 685.101, 1 student, 4.000 GPR
- 5. Spring 2001, Math 142.518, 61 students, 1.872 GPR
- 6. Spring 2001, Math 685.605, 1 student, 4.000 GPR

18.18 2000

- 1. Fall 2000, Math 685.605, 1 student, 4.000 GPR
- 2. Fall 2000, Math 142.501, 108 students, 2.426 GPR
- 3. Summer 2000, Math 691.105, 1 student
- 4. Spring 2000, Math 691.603, 1 student
- 5. Spring 2000, Math 489.500, 11 students, 3.800 GPR
- 6. Spring 2000, Math 141.510, 93 students, 2.189 GPR

18.19 1999

- 1. Fall 1999, Math 308.508, 51 students, 2.489 GPR
- 2. Fall 1999, Math 691.605, 1 student
- 3. Spring 1999, Math 166.507, 90 students, 2.354 GPR

18.20 1998

- 1. Fall 1998, Math 141.525, 19 students, 2.494 GPR
- 2. fall 1998, Math 489.500, 20 students, 3.737 GPR
- 3. Spring 1998, Math 166.200, 17 students, 3.824 GPR
- 4. Spring 1998, Math 485.204, 8 students, 3.857 GPR

18.21 1997

- 1. Fall 1997, Math 166.201, 19 students, 3.368 GPR
- 2. Fall 1997, Math 485.204, 14 students, 3.929 GPR
- 3. Summer 1997, Math 691.103, 1 student
- 4. Spring 1997, Math 152.522, 33 students, 1.923 GPR
- 5. Spring 1997, Math 152.523, 34 students, 2.074 GPR
- 6. Spring 1997, Math 152.524, 20 students, 2.063 GPR
- 7. Spring 1997, Math 691.607, 1 student

18.22 1996

- 1. Fall 1996, Math 151.525, 35 students, 2.500 GPR
- 2. Fall 1996, Math 151.526, 36 students, 2.097 GPR
- 3. Fall 1996, Math 151.527, 29 students, 2.444 GPR
- 4. Fall 1996, Math 691.616, 1 student
- 5. Summer 1996, Math 691.210, 1 student
- 6. Spring 1996, Math 691.601, 1 student

18.23 1995

- 1. Fall 1995, Math 308.501, 51 students, 2.605 GPR
- 2. Summer 1995, Math 685.106, 1 student, 4.000 GPR
- 3. Spring 1995, Math 152.516, 24 students, 1.783 GPR
- 4. Spring 1995, Math 152.517, 32 students, 1.828 GPR
- 5. Spring 1995, Math 152.518, 31 students, 2.000 GPR

18.24 1994

- 1. Fall 1994, Math 485.501, 5 students, 4.000 GPR
- 2. Fall 1994, Math 685.611, 3 students, 4.000 GPR
- 3. Summer 1994, Math 691.603, 2 students
- 4. Spring 1994, Math 308.502, 71 students, 2.750 GPR
- 5. Spring 1994, Math 308.503, 51 students, 2.600 GPR
- 6. Spring 1994, Math 691.615, 1 student

18.25 1993

- 1. Fall 1993, Math 161.502, 81 students, 1.902 GPR
- 2. Summer 1993, Math 685.301, 1 student, 4.000 GPR
- 3. Spring 1993, Math 161.501, 109 students, 2.000 GPR
- 4. Spring 1993, Math 685.603, 1 student, 4.000 GPR
- 5. Spring 1993, Math 691.604, 1 student

18.26 1992

- 1. Fall 1992, Math 639.600, 14 students, 3.786 GPR
- 2. Summer 1992, Math 662.200, 17 students, 4.000 GPR
- 3. Summer 1992, Math 691.103, 2 students
- 4. Summer 1992, Math 691.206, 2 students
- 5. Spring 1992, Math 151.513, 24 students, 1.905 GPR
- 6. Spring 1992, Math 151.514, 24 students, 1.950 GPR
- 7. Spring 1992, Math 151.515, 22 students, 1.908 GPR
- 8. Spring 1992, Math 151.516, 24 students, 2.238 GPR
- 9. Spring 1992, Math 485.202, 1 student, 4.000 GPR
- 10. Spring 1992, Math 685.608, 1 student, 2.000 GPR

18.27 1991

- 1. Fall 1991, Math 151.525, 28 students, 2.346 GPR
- 2. Fall 1991, Math 151.526, 28 students, 2.593 GPR
- 3. Fall 1991, Math 151.527, 27 students, 1.870 GPR
- 4. Fall 1991, Math 151.528, 27 students, 1.522 GPR
- 5. Fall 1991, Math 151.545, 27 students, 2.227 GPR

- 6. Fall 1991, Math 151.546, 27 students, 1.950 GPR
- 7. Fall 1991, Math 151.547, 26 students, 1.429 GPR
- 8. Fall 1991, Math 151.548, 26 students, 1.708 GPR
- 9. Fall 1991, Math 485.202, 1 student, 4.000 GPR
- 10. Summer 1991, Math 485.303, 1 student, 4.000 GPR
- 11. Spring 1991, Math 308.501, 105 students, 2.273 GPR
- 12. Spring 1991, Math 664.600, 9 students, 4.000 GPR

18.28 1990

- 1. Fall 1990, Math 308.502, 97 students, 2.489 GPR
- 2. Fall 1990, Math 661.600, 5 students, 3.200 GPR
- 3. Summer 1990, Math 691.307, 1 student
- 4. Spring 1990, Math 122.200, 16 students, 2.933 GPR
- 5. Spring 1990, Math 691.607, 1 student

18.29 1989

- 1. Fall 1989, Math 121.200, 28 students, 2.370 GPR
- 2. Fall 1989, Math 308.502, 86 students, 2.205 GPR
- 3. Fall 1989, Math 691.610, 1 student
- 4. Spring 1989, Math 661.600, 6 students, 3.833 GPR
- 5. Spring 1989, Math 691.605, 1 student

18.30 1988

- 1. Fall 1988, Math 308.503, 59 students, 2.186 GPR
- 2. Fall 1988, Math 485.503, 1 student, 4.000 GPR
- 3. Fall 1988, Math 639.600, 16 students, 4.000 GPR
- 4. Fall 1988, Math 691.605, 1 student
- 5. Spring 1988, Math 610.600, 25 students, 3.435 GPR
- 6. Spring 1988, Math 691.605, 1 student

18.31 1987

- 1. Fall 1987, Math 308.501, 81 students, 2.359 GPR
- 2. Fall 1997, Math 639.600, 19 students, 4.000 GPR
- 3. Fall 1987, Math 691.604, 1 student
- 4. Spring 1987, Math 308.501, 73 students, 2.726 GPR
- 5. Spring 1987, Math 610.600, 29 students, 3.586 GPR
- 6. Spring 1987, Math 685.607, 1 student, 3.000 GPR
- 7. Spring 1987, Math 691.604, 1 student

18.32 1986

- 1. Fall 1986, Math 131.502, 107 students, 1.735 GPR
- 2. Fall 1986, Math 609.600, 30 students, 3.250 GPR
- 3. Spring 1986, Math 304.511, 32 students, 2.906 GPR
- 4. Spring 1986, Math 417.501, 15 students, 2.733 GPR
- 5. Spring 1986, Math 417.502, 12 students, 2.909 GPR
- 6. Spring 1986, Math 417.503, 15 students, 2.533 GPR
- 7. Spring 1986, Math 417.504, 13 students, 2.600 GPR

18.33 1985

- 1. Spring 1985, Math 308.501, 72 students, 2.386 GPR
- 2. Spring 1985, Math 639.600, 11 students, 3.800 GPR