CURRICULUM VITAE

Hamide Dogan University of Texas at El Paso (UTEP) Mathematical Sciences Department e-mail: hdogan@utep.edu

EDUCATION

2001 Ph.D. Mathematics, University of Oklahoma, Norman. Dissertation Advisor: Dr. Curtis McKnight, Professor of Mathematics, University of Oklahoma.

1995 MS. Mathematics, University of Oklahoma, Norman. December, 1995.

1991 BS. Mathematics, Middle East Technical University (M.E.T.U), Ankara, Turkiye. May, 1991.

RESEARCH FOCUS:

My research interests are in linear algebra and its applications, cognition of linear algebra as well as technology use both as computational tools and as instructional support in advanced mathematics classes.

WORK HISTORY

2007-Present Associate Professor of Mathematics at the University of Texas at El Paso.

2002-2007 Graduate Advisor for the Master of Arts in Teaching (MAT) in Mathematics at UTEP, Mathematical Sciences.

2001(Sept)- 2007 Assistant Professor of Mathematics at the University of Texas at El Paso (UTEP).

2000-2001 Assistant Professor. Eastern Connecticut State University. 1992 (Sept)-2000 Teaching Assistant, University of Oklahoma (OU).

1994-1995 Research Assistant, University of Oklahoma, NSF/REU Summer Program in Mathematics.

SOME OF THE COURSES TAUGHT

Calculus I, II and III, integrating online tools; Elluminate (virtual classroom), WebAssign, Webct and BlackBoard.

Matrix algebra integrating online materials and tools; web-based supplementary materials supported by an NSF grant, **Elluminate** is used for office hours.

Principles of Mathematics using **Elluminate** for office hours.

Higher Mathematics

Logic and proof

Calculus and Analysis

Technology in mathematics classroom, offered the course **fully online** with **Elluminate** (online course delivery system) and Blackboard.

Introduction to research in mathematics education, offered as a hybrid course using webct.

Linear algebra taken by mathematics undergraduate and mathematics and statistics graduate students, using NSF supported online web-modules, and investigations via blackboard.

PUBLICATIONS AND RESEARCH ACTIVITIES (* with students; Journal papers).

PAPERS

- 1. Dogan, H., (2016). Mathematical Induction: Deductive Logic Perspective. *To appear in European Journal of Science and Mathematics Education (EJSME)*, 4(3), 315-330.
- 2. Dunlap, H., (2015). Matrix Power, Determinant, and Polynomials. *Journal of Progressive Research in Mathematics (JPRM)*, 5(4), 601-605.
- 3. Dogan, H. (2014). "2x2 Matrix Operations Acting On A Unit Square." http://demonstrations.wolfram.com/2x2MatrixOperationsActingOnAUnitSquare/Wolfram Demonstrations Project Published: June 17, 2014.

- Dogan, H. (2014). "Sets of Linear Combinations and Their Images under Linear Transformations." http://demonstrations.wolfram.com/SetsOfLinearCombinationsAndTheirImagesU nderLinearTransformat/ Wolfram Demonstrations Project Published: June 27, 2014, 2.
- 5. Dogan, (2014). *Multiple Tasks Derived from an Interactive Module: Linear Transformations and Eigenspace*. Proceedings of 26th anniversary International Conference on Technology in Collegiate Mathematics.
- 6. Dogan (2013). Cognitive Traits of Instructional Technology: Linear Algebra. Proceedings of 25th anniversary International Conference on Technology in Collegiate Mathematics.
- 7. Dogan (2012). Emotion, Confidence, Perception and Expectation: Case of Mathematics. International Journal of Science and Mathematics Education, IJSME. Vol. 10; pp. 49-69. ****One of the top ranked journals in mathematics education.
- 8. Dogan (2012). *Cognition of Abstract Mathematics: E-learning*. Proceedings of IADIS International Conference e-Learning 2012. Full Papers. Pp. 311-317.
- 9. Dogan (2011). *Set Theory in Linear Algebra*. Journal of Math. Aeterna, Vol. 1, 2011, no. 05, pp. 317-327.
- 10. H. Dogan, *R. Carrizales and *P. Beaven (2011). Metonymy and object formation: vector space theory. In Ubuz, B. (Ed.) Proceedings of the 35th Conference of the international group for the Psychology of Mathematics Education, (Research Reports) Vol. 2, pp. 265-272. Ankara, Turkey: PME. ***Top conference proceeding; Recognized, cited regularly, and published in by well known researchers.
- 11. H. Dogan (2011). Metaphor to Metonymy of Slope. PME-NA33. Nevada, October 2011. In Wiest, L. R., & Lamberg, T. (Eds.). (2011). Proceedings of the 33rd Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Reno, NV: University of Nevada, Reno, pp. 1951-1958. ***Top conference proceeding; Recognized, cited regularly, and published in by well known researchers.
- 12. H. Dogan-Dunlap (2010). Linear Algebra Students' Modes of Reasoning: Geometric Representations. Linear Algebra and Its Applications (LAA), 432. pp. 2141-2159. ***One of the top ranked journals in mathematics.
- 13. H. Dogan-Dunlap (2010). Interactive Online Modules and Take-Home Assignments for Inquiry-Learning to Provide First-Hand Experience in Matrix Algebra Course. NSF Final Report.

- **14.** H. Dogan-Dunlap and *F. P. Meza. (2008). Summaries of Two Theses on Student Thinking in Linear Algebra. IMAGE, The Bulletin of the International Linear Algebra Society (ILAS). Spring 2008, issue number 40, Spring 2008. pp.18-20.
- 15. H. Dogan-Dunlap and *R. Jordan (2008). *Modeling Spiral Growth in a GSP Environment*. Journal of Online Mathematics and its Applications (JOMA). Volume 8. February 2008. 18 pages.
- 16. H. Dogan-Dunlap, (2007). Reasoning with metaphors and constructing an understanding of the mathematical function concept. In J. Woo, H. Lew, K. Park and D. Seo (Eds.) Proceedings of the 31st Conference of the International Group for the Psychology of Mathematics Education (PME) Seoul, Korea, July 8-13, 2007. Refereed Research papers. pp. 209-217, Volume 2. ***Top conference proceeding; Recognized, cited regularly, and published in by well known researchers.
- 17. H. Dogan-Dunlap, J. Dunlap, E. Izquierdo and O. Kosheleva (2007). Learn by Teaching: A Mediating Approach to Teaching and Learning Mathematics for Prospective Teachers. Journal of Issues in the Undergraduate Mathematics Preparation of School Teachers (IUMPST), April, 2007. pp. 1-15.
- 18. H. Dogan-Dunlap. (2006). Socialization in Online Mathematics Learning Environments. The Journal of Technology and Teacher Education, 2006, Vol. 6, pp. 3712-3717. (Award winning research paper at the Society for Information Technology and Teacher Education International Conference (ISTE)).
- 19. H. Dogan-Dunlap and *Q. Liang, (2006) "Affect Factors: Case of a Pedagogical approach for prospective teachers." Alatorre, S., Cortina J.L., Saiz, M., and Mendez, A. (Eds), The proceedings of 28th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA). Research Papers. Mérida, México, Vol.2, pp. 717-723. ****Top conference proceeding; Recognized, cited regularly, and published in by well known researchers.
- 20. H. Dogan-Dunlap, (2006). "Intermediate algebra students' nonmathematical prior knowledge and conceptualization of function." Proceedings of the Third International Conference on the Teaching of Mathematics (at the undergraduate level). Istanbul, Turkey. Refereed paper number 429. 7 pages.
- **21.** H. Dogan-Dunlap, (2006). "Pre-service Teachers' Attitude Toward and Perception of Mathematics: Case of a pedagogical approach to teaching and learning." Proceedings of the Third International Conference on the Teaching of Mathematics (at the undergraduate level). Istanbul, Turkey. Refereed paper number 430. 6 pages.

- 22. H. Dogan-Dunlap. (2006) "Socialization in Online Mathematics Learning Environments." The proceedings of the 2006 Society for Information Technology and Teacher Education International Conference. Orlando, Florida, pp. 3712-3717.
- 23. H. Dogan-Dunlap. (2006) "Lack of Set Theory-Relevant Prerequisite Knowledge." International Journal of Mathematical Education in Science and Technology (IJMEST). Vol. 37, No. 4, June 2006. pp. 401-410. One of the well-known journals in mathematics. ****one of the top known journals in mathematics.
- 24. H. Dogan-Dunlap, J. Peeples and S. Lewis (2006). "Women in Math Play." Association for Women in Mathematics Newsletter, Vol. 36. No. 3. May-June, 2006. pp. 22-23.
- 25. *C. Torres and H. Dogan-Dunlap (2006) "Technology use in ability-grouped high school mathematics classrooms." E-Journal of Instructional Science and Technology (e-JIST). Vol. 9, No. 1 (13 pages).
- 26. H. Dogan-Dunlap, *C. Torres and *F. Chan (2005). "Language-Based Prior Knowledge and Transition to Mathematics." ERIC Education Resources Publication. ED490513.
- 27. H. Dogan-Dunlap (2004) "Changing Students' Perception of Mathematics through An Integrated, Collaborative, Field-Based Approach To Teaching and Learning Mathematics." ERIC Education Resources Publication. ED490407.
- **28.** H. Dogan-Dunlap (2004). "*Pedagogy of Online Courses: Case of Matrix and a Research Mathematics Courses.*" The proceedings of the 17th ICTCM (International Conference on Technology in Collegiate Mathematics) conference. New Orleans. pp. 68-73.
- 29. H. Dogan-Dunlap, (2004). "Computers and Linear Algebra." WSEAS Transactions on Mathematics. Vol. 3, Issue 3, pp. 537-542.
- **30.** H. Dogan-Dunlap, (2004) "Computers and Linear Algebra." The CD-ROM proceedings of the 2004 WSEAS International Conference on Applied Mathematics. ISBN: 968-8457--01-7.
- 31. H. Dogan (2004). "A *comparison Study Between a Traditional and Experimental Program.*" Paper presented at the ISCA 10th international conference on Intelligent Systems. ERIC Education Resources Publication. ED482567.
- 32. H. Dogan-Dunlap. (2004) "Visual Instruction of Abstract Concepts for Non-major Students." The International Journal of Engineering Education (IJEE). Vol. 20. n.4. pp 671-676. ****Top ranked journal among education journals.
- 33. H. Dogan-Dunlap, (2003). "Technology-Supported Inquiry Based Learning in Collegiate Mathematics." The Electronic Proceedings of the 16th annual ICTCM

- (International Conference on Technology in Collegiate Mathematics), Chicago, November 2003 (6 pages).
- 34. H. Dogan, (2001). "A Comparison Study Between a Traditional and Experimental Program" published in the Proceedings of the ISCA 10th International Conference on Intelligent Systems, June 13-15, 2001 the Hyatt Arlington, Virginia.
- 35. H. Dogan, (2001)." A comparison study between a traditional and experimental first year linear algebra program." Unpublished Dissertation, University of Oklahoma, Norman.

It can be found at www.math.utep.edu/Faculty/hdogan/home.htm.

Book Chapters

- H. Doğan-Dunlap, E. Özdemir Erdoğan and Ç. Kılıç (2010). *Mathematical Induction: Misconceptions and Learning Difficulties* (Mathematiksel Tumevarim: Karsilasilan Kavram Yangilari ve Ögrenme Güçlükleri). In M. F. Özmantar, E. Bingölbali, and H. Akkoç (Eds.) Matematiksel Kavram Yanılgıları ve Çözüm Önerileri (Conceptual Understanding in Mathematics and Recommendations). Pegem Academy Publishing. Chapter 11, pp. 293-330. 2nd edition. (in Turkish).
- H. Doğan-Dunlap, E. Özdemir Erdoğan and Ç. Kılıç (2008). *Mathematical Induction: Misconceptions and Learning Difficulties* (Mathematiksel Tumevarim: Karsilasilan Kavram Yangilari ve Ögrenme Güçlükleri). In M. F. Özmantar, E. Bingölbali, and H. Akkoç (Eds.) Matematiksel Kavram Yanılgıları ve Çözüm Önerileri (Conceptual Understanding in Mathematics and Recommendations). Pegem Academy Publishing. Chapter 11, pp. 293-330, 1st edition (Invited chapter). (In Turkish).
- H. Dogan-Dunlap and *M. Ramos. (2007) *Transitioning from University Math Education to First-Year Math Teacher: Examining Data Analysis in a Qualitative Study*. In E. Hampton, and S. Peregrino (Eds.) A Toolkit for Educator Research: Research for Mutual Understanding in Diverse Communities. Kendall/Hunt Publishing. Chapter 9 pp. 124-142.

Contributions in Books

Özdemir Erdoğan, E., Kılıç, Ç., Dunlap, H. (2010). Mathematiksel Tumevarim: Karsilasilan Kavram Yangilari ve Ögrenme Güçlükleri. In M. F. Özmantar, E. Bingölbali, and H. Akkoç (Ed.), Matematiksel Kavram Yanılgıları ve Çözüm Önerileri (ed.). Ankara: Pegem Academy Publishing.

*Melinda, R., Dunlap, H. (2007). Qualitative Data Analysis: Practicing with raw Data. In E. Hampton, and S. Peregrino (Ed.), A Toolkit for Educator Research: Research for Mutual Understanding in Diverse Communities. (vol. Chapter 8., pp. pp.100-123.). Kendall/Hunt Publishing:

Ramos, M*., Dogan, H. (2007). Transitioning from University Math Education to First-Year Math Teacher: Examining Data Analysis in a Qualitative Study. In E. Hampton, and S. Peregrino (Ed.), A Toolkit for Educator Research: Research for Mutual Understanding in Diverse Communities (vol. Chapter 9, pp. 124-142). Kendall/Hunt Publishing.

Dogan, H. (2005) "Count Her In!" An MAA Tensor grant supported book. S.L. Lewis, J. Peeples and H. Dogan-Dunlap. 2005.

Dogan, H (2004) "Traveling Workshops in Teacher Preparation." The American Association of Two-Year Colleges (AMATYC). Collins, R. et al. (Eds.) A member of the TP (Teacher Preparation) Facilitators. Published by NSF grant #0101683, 2004.

Books (* with students)

H. Dogan-Dunlap. (2008). *Linear Algebra Teaching and Learning: Visualization*. Dr. Müller Aktiengesellschaft & Co. KG Publishing, Germany.

*S. Villa and H. Dogan-Dunlap (2009). *Mathematics Performance and Reading Skills: Problem Solving*. VDM Verlag publishing. (Modified version of Sandra Villa's thesis).

Newsletter and Magazine Articles

"Women in Math Play." Association for Women in Mathematics Newsletter, Vol. 36. No. 3. May-June, 2006. pp. 22-23. Coauthors: J. Peeples and S. Lewis.

"MAA Southwest Section Meeting." UTEP Mathematical Sciences Department fall Newsletter, 2005.

"MAA Southwest Section Meeting Report," April 2005. Southwest Section Newsletter, Vol. 19, N: 1. pp 3-4, 2005.

MAA Southwest section meeting announcement. Southwest Section Newsletter. Vol. 18, No.2. February 2005.

"Section Meeting." Southwest Section Newsletter. Vol. 18, n1, October, 2004.

Abstracts (* by students)

Melendez, M*., Dunlap, H. (2014). (vol. 430). *Gaming as Educational* Tool. TEXAS: COURI Symposium Abstracts, Summer 2014. http://cossrvfile00.utep.edu/couri/abstracts/index.php/Submissions/display/Spring%2 02014ming

- *J. Loya, *A. Muniz and H. Dogan (2012). *Matrix Product Application to Fibonacci Sequence*. <u>COURI Symposium Abstracts</u>, <u>Spring 201</u>2. Abstract number ?? http://digitalcommons.utep.edu/couri_abstracts/??/
- *L. Berumen, E. Chaidez, H. Dogan and J. G. Rosiles (2011). *Increasing Efficiency in Boundary Security with Wireless Sensor Networks and Geospatial Information Systems using Homology Theory.* <u>COURI Symposium Abstracts, Spring 2011</u>. Abstract number, 40. http://digitalcommons.utep.edu/couri_abstracts/40/ (received best poster award in mathematics and physical sciences).
- H. Dogan-Dunlap. 2006. Socialization in Online Mathematics Learning environments. C. M. Crawford (Managing editor), Society for Information Technology and Teacher Education. 17th International conference. Abstracts. March 20-24, Orlando, Florida, USA. pp.30.
- H. Dogan-Dunlap. 2006. "Intermediate Algebra Students' Language-Based Knowledge and their Conceptualizations of Function." RUME conference, Piscataway, New Jersey. http://mathed.asu.edu/CRUME2006/Abstracts.html.
- H. Dogan-Dunlap. 2004. "Changing Students' Perception of mathematics through an Integrated, Collaborative, Field-Based approach to Teaching and Learning Mathematics." The 2004 AMS conference abstracts. Reference number for the abstract: 993-Y1-1636.
- H. Dogan, 2003. "An activity to Enhance Understanding of Sets." The MAA Southwest section meetinging April 5-62003 http://www.nmt.edu/~wstone/www/MAAmeeting/DoganDunlap.
- H. Dogan, E. Izquierdo and O. Kosheleva, 2002. "Outcome of a Collaboration Between two University Departments: Mathematics and Education." The Fifth Annual Mathematics Education Institute at the New Mexico State University in March 16-19, 2002. http://www.math.nmsu.
- H. Dogan, 2002. "Effects of Use of MATHEMATICA in Learning of Basic Linear Algebra Concepts." The 2002 AMS conference abstracts: Reference number for the abstract: 973-SI-496.

Others

H. Dogan-Dunlap. (2008). *Making Transition to Linear Independence Through Set Theory and a Web Module*. Presentations made at the Joint Meetings of the MAA and AMS from the contributed papers sessions on Innovative and Effective Ways to Teach Linear Algebra. San Diego, 2008.

http://math.pepperdine.edu/dstrong/LinearAlgebra/2008/index.html

H. Dogan-Dunlap. Virtual interactive activities for linear algebra. www.math.utep.edu/Faculty/hdogan/home.htm.

THESES

- 1. Kalantarian Enayat (2012) Comparative Investigation of Cognitive and Pragmatic Thinking Modes: Linear Algebra. UTEP Master Thesis.
- 2. Carrizales Ruben (2011) Cognitive Constructs in Linear Algebra: Metaphors, Metonymies and Modes. UTEP Thesis and Dissertations.
- 3. Beaven S. Persis (2011). Metaphors, Metonymies, Modes and Linear Algebra. 1494332. MAI 49/06, Dec 2011: ProQuest Dissertations and Theses.
- 4. Azucena Zamora (2010). *Use of cognitive constructs in linear algebra*. (2076864511th ed.). MAI 48/06, Dec 2010: ProQuest Dissertations and Theses.
- 5. Hong Yue (2008) Concept Maps as Assessment Tools in Mathematics: Comparison with Clinical Interviews. Master's Thesis directed by Dogan-Dunlap, H. May 7th, 2008 Master's Thesis, University of Texas at El Paso Library, electronic resources. Best thesis award winner.
- 6. Sandra Villa (2008) Correlation between Reading and Mathematics performance: An analysis of Stanford Achievement Test Scores in Grades 6-11. Master's Thesis directed by Dogan-Dunlap, H. April 29th, 2008 **Master's Thesis**, University of Texas at El Paso Library, **electronic resources**.
- 7. Robert Trejo (2007). "Student Thinking Modes Expressed while Determining Linear Independence/Dependence of Sets of Vectors." Trejo, R., Master's Thesis directed by Dogan-Dunlap, H. May 7th, 2007 **Master's Thesis**, University of Texas at El Paso Library, **electronic resources. 6375.**
- **8.** Fara Meza (2007). "Student Thinking Modes: The Case of Solution Sets and Linear Independence from First Year Linear Algebra." Meza, F., Master's Thesis directed by Dogan-Dunlap, H. May 17th 2007. **Master's Thesis,** University of Texas at El Paso Library, **electronic resources. 6391.**
- 9. Lorraine Melgoza (2007). "The Implementation of Positive Descriptive Feedback Based on Daily Assessment in a College Developmental Mathematics Class." Melgoza, Lorraine., Master's Thesis directed by Dogan-Dunlap, H. and co-chaired by Lesser, L. April 24th, 2007. Master's Thesis, University of Texas at El Paso Library, electronic resources.

- 10. Melinda Ramos (2006). "Do Pre-service Teachers' beliefs and classroom practices towards mathematics change when they begin teaching?" Ramos J. M., Master's Thesis directed by Dogan-Dunlap, H. Master's Thesis, University of Texas at El Paso Library, electronic resources no: 6255. May, 2006.
- 11. Christina Torres (2005). "Differences in teachers' choice of technology and its implementation amongst ability-grouped high school math classes." Torres, E. C. Master's Thesis directed by Dogan-Dunlap, H. University of Texas at El Paso Library, electronic resources no: 6070.
- 12. German Moreno (2003). "Relationships between Interaction, Definition, and Proof." by Moreno, G. A. Master Thesis directed by Dogan-Dunlap, H. University of Texas at El Paso Library, electronic resources no. 5921, 2003. He successfully defended his thesis in fall 2003, and received the Department's outstanding thesis award.

Graduate Theses Committee Service

Enayat Kalantarian	Fara Meza	Veronica Herrera
Ruben Carrizales	Qianyin Liang	Barbara Cabral
Persis Beaven	Cristina Torres	Rubi De Smet
Iona Agut	Melinda Ramos	Hasan Sezer
Lorraine Melgoza	German Moreno	Marie De Billie
Robert Trejo	Margaret Gutierrez	

Self-Publication by Graduate/Undergraduate Students

M. Ramos. (2007) Qualitative Data Analysis: Practicing with raw Data. In E. Hampton, and S. Peregrino (Eds.) A Toolkit for Educator Research: Research for Mutual Understanding in Diverse Communities. Kendall/Hunt Publishing. Chapter 8. pp.100-123.

AWARDS

(2011) MAA Regional Excellence in Teaching Award.

(2011) COURI Best poster in mathematics and physical sciences award by undergraduate students, Luis Berumen and Eric Chaidez.

2006 Outstanding poster award at the Society for Information Technology and Teacher Education International Conference (Among 100 posters) 2006.

2005 Bristol Excellence for Teaching Award at the University of Texas at El Paso, 2005.

1999-2000 Harold Huneke Graduate Scholarship Award (twice); This award is given every year to only two graduate students in recognition of their strong academic records as mathematics graduate students and their demonstrated commitment to mathematics education 1999 and 2000.

Award Undergraduate and Graduate students received due to work done with me

Reichert, P, Dogan, H. (2-13-2014) "In Search of Primes and Modular Arithmetic." Undergraduate research project. Paper presented at SunMARC undergraduate research conference in 2014 place 3rd among all presentations at the conference.

Luis Berumen and Eric Chaidez. COURI Best poster in mathematics and physical sciences. 2011.

Cristina Torres was selected by the Graduate School as the *Graduate School Banner Bearer* for spring 2005.

Cristina Torres and Fan Chan: Best graduate student presentation award at the MAA Southwest section conference (on a research I directed), 2005.

German Moreno: Department's outstanding thesis award, 2003.

Rubi De Smet (undergraduate student): accepted into the Summer Psychology Research Experiences Program as a result, 2004.

FUNDED GRANTS

Large Grants as PI

2008-2010 NSF/CCLI Grant: Interactive Online Modules and Take-Home Assignments for Inquiry-Learning to Provide First-Hand Experience in Matrix Algebra Course. Co-PI: Piotr Wojciechowski. \$149,939. Only Ten percent of the submitted proposals are funded.

Small Grants

- 1. 2016 Dunlap, Hamide, Suarez, Luis R. (UTEP COURI/SURPASS), "Matrix Product Algorithms, Toeplitz Matrices and Applications in Physics," Sponsored by Other, UTEP COURI and SURPASS. About \$5000 (May 2016 August 2016).
- 2. 2014 Dunlap, Hamide (UTEP COURI), Menendez, Matthew, "Gaming as Educational Medium," Sponsored by Other, The University of Texas at El Paso, \$5,000.00. (May 2014 September 2014).
- 3. 2011 NSF-Biological Sciences. Travel grant to a series of symposiums on application of mathematics in biological sciences.
- **4.** 2008 NSF/AWM Mathematics Education Research Travel Grant. Provided support to research conferences. \$789.
- 5. 2007 The Richard Skemp Memorial Grant through PME that provides support for research activities. \$500.
- 6. 2005 Wolfram. Inc. grant: Four copies of *Mathematica* to be given to the best two undergraduate and two graduate presentations at the MAA Southwest section meeting in April 2005.
- 7. 2005 Association for Women in Mathematics (AWM) travel grant to support Tensor groups' performances at conferences.
- 8. 2004 "Encountering women in mathematics' past." MAA Tensor grant for women in mathematics project with J. Peeples from EPCC. \$5000.
- 9. 2002 UTEP University Research Institute (URI) scholarship. \$1500.
- 10. 2002 "An interactive online Laboratory for the enhancement of matrix algebra and calculus III courses" Wolfram Inc. project grant. Grant provided licensing for 25 computers (grant paid partially the cost of the licensing for the first three years) as well as 25 copies of *Mathematica* and Web*Mathematica* for Mathematics faculty. Total grant approximated to \$5000.
- 11. 2001 The Summer AAUP Curriculum Development Award for Placement of In Coming First Year Students in Computer Science Classes with Dr. Rommel from Eastern Connecticut State University. \$2500.
- 12. 2002 UTEP Minority Alliance Program (LS AMP) (Partnership between UTEP and the El Paso Community college to gain high potential students from the Community College to Research programs at UTEP)-\$1500 for materials to be used

for the research I am conducting with a student from the Community College. \$1500.

Number of Students Supported through grants (as PI):

Julio Seanz by URI grant; Undergraduate student in computer science

Ivan Vargas by NSF/CCLI grant; Graduate student in MS

Azucena Zamora by NSF/CCLI grant; Graduate student in MAT

Rubi De Smet by LS AMP and MARC grants; Undergraduate student in mathematics.

Fan Chen by NSF/MSP grant; Graduate Student in MAT

Christina Torres by NSF/MSP grant; Graduate Student in MAT

Melinda Ramos NSF/MSP grant; Graduate Student in MAT

Mo Pak NSF/MSP grant; Graduate Student in MAT

STUDENTS WHO WORKED WITH ME ON RESEARCH PROJECTS

Undergraduate Research/Honors Research projects

Paula Reichert	Abigail Muniz	Aileen Rentera
Jacob Valdiviez	Paulina Almada	Rubi De Smet
Matthew Melendez	Jorge A. Ramirez	Julio Seanz
Eric Chaidez	Kristina Barron	Justin Butterfield
Luis Berumen,	Paloma Sanchez	Luis Suarez
Eduardo Carventes	Elliott I. Gurrola	Francisco A. Rodriguez
Ramirez Luis	Adrian Moreno	_
Jesus Loya	Cristina Arenaz	

Graduate Students with Research Projects Directed (Apart from the theses work listed above)

Fan Chen

Qianyin Liang

Mo Pak

Melinda Ramos

Cristina Torres

Iryna Daniv

Ishraq Al-Awamleh

Heidy Chavira

Jodi Copley

Joe Blas

Candace Warren

Ray Jordan

Demian Pillatzke

Gerald Smith

Cesar Ramirez

Andy Streeter

Claudia Talamantes

Roger Winter

Stella Woo

Sandra Kneeskern

Miles Kettel

Luis Suarez

Khalil Kachmar

SOME ARTICLES UNDERGRADUATE AND GRADUATE STUDENTS PRODUCED DUE WORK DONE WITH ME

- 1. *Melendez, M, Dogan, H.* (2014). (vol. 430). Gaming while Learning. TEXAS: COURI Symposium Abstracts, Summer 2014. http://cossrvfile00.utep.edu/couri/abstracts/index.php/Submissions/display/Spring %202014
- 2. *Melendez, M. Dogan, H.* (2014). "*Transformations Acting on Euclidean Objects.*" Undergraduate Honors Thesis.
- 3. *Valdiviez, J, Dogan, H* (2013-2014) "*Java-Based Algorithm for Matrix power computation using polynomial approach*". Undergraduate Honors Thesis.
- 4. *Reichert*, *P*, *Dogan*, *H*. (2-13-2014) "In Search of Primes and Modular Arithmetic." Undergraduate research project. Paper presented at SunMARC undergraduate research conference in 2014 place 3rd among all presentations at the conference.
- 5. Loya, A. Muniz and H. Dogan (2012). Matrix Product Application to Fibonacci Sequence. COURI Symposium Abstracts, Spring 2012.
- 6. http://digitalcommons.utep.edu/couri_abstracts.
- 7. H. Dogan, R. Carrizales and P. Beaven (2011). *Metonymy and object formation: vector space theory*. In Ubuz, B. (Ed.) Proceedings of the 35th Conference of the international group for the Psychology of Mathematics Education, (Research Reports) Vol. 2, pp. 265-272. Ankara, Turkey: PME.
- **8.** Berumen, E. Chaidez, H. Dogan and J. G. Rosiles (2011). *Increasing Efficiency in Boundary Security with Wireless Sensor Networks and Geospatial Information Systems using Homology Theory*. <u>COURI Symposium Abstracts, Spring 2011</u>. Abstract number, 40.
- 9. C. Torres and H. Dogan-Dunlap (2006) "Technology use in ability-grouped high school mathematics classrooms."
- 10. H. Dogan-Dunlap, C. Torres and F. Chan (2006). "Language-Based Prior Knowledge and Transition to Mathematics."
- 11. H. Dogan-Dunlap, M. Ramos, E. Hampton, and S. Peregrino (2006). Transition from University Math Education to First-Year Math Teacher: Examining Data Analysis in a Qualitative Study.
- 12. H. Dogan-Dunlap and Q. Liang, "Affect Factors: Case of a Pedagogical approach for prospective teachers."
- 13. J. Ramos and H. Dogan-Dunlap. Do pre-service teachers' beliefs and classroom practices towards mathematics change when they begin teaching?(In progress).

- **14.** H. Dogan-Dunlap, Jordan R., Pillatzke. D., and Smith G. Emotion, Confidence, Perception and Expectation: Case of Mathematics for Pre-service Teachers.
- 15. H. Dogan-Dunlap, C. Torres, F. Chen and Rubi Smet. Common language meanings students hold.
- 16. H. Dogan-Dunlap, Melinda Ramos and Mo Pak. Attitude and Perception: A Case of a Mediating Approach to Teaching and Learning Mathematics.
- 17. H. Dogan-Dunlap and J. De Smet. Concept Maps in Mathematics.
- 18. Copley, J. Blas, C. Warren. " The effect of Teacher Collaboration on Student Performance."
- 19. C. Ramirez. "Students with learning Disabilities and their Social Adjustments."
- 20. Streeter. "History-based Mathematics Project on the Motivation and Appreciation of a Class of Geometry Students."
- 21. Talamantes. "The effects of Doing Research on History of Mathematics."
- 22. R. Winter. "Using concept Maps to Improve Test Scores."
- 23. S. Woo, S. Kneeskern, M. Kettel. "Technology in the Geometry Classroom: A Pilot Study."
- 24. Al-Awamleh. Measuring The Effectiveness of Visual Instructional Media in Teaching Linear Algebra for Undergraduate Students.
- 25. H. Dogan-Dunlap and R. De Smet. Concept maps as measures of Success in Mathematics: with emphasis on Slope.
- 26. Roman De Smet. Structural Knowledge of slope explored through concept maps.