Deborah Koslover

dkoslover@uttyler.edu

Education

- Ph. D. in Mathematics, specialization Mathematical Physics, University of California, Irvine (2005)
- M.S. in Mathematics, University of California, Irvine (2002)
- Teaching Credential in Mathematics and the Physical Sciences, K-Junior College, University of California, Irvine (1984)
- B.S. in Physics, cum laude, University of California, Irvine (1982)

Professional Experience

- Professor of Instruction, University of Texas, Tyler (2022 Present)
- Senior Lecturer/Associate Professor of Instruction, University of Texas, Tyler (2017 – 2022)
- Associate Professor, University of Texas, Tyler (2011 – 2017)
- Assistant Professor, University of Texas, Tyler (2005 – 2011)
- Research Assistant, University of California, Irvine (July 2001 June 2005)
- Instructor, University of California, Irvine (June 2002 December 2003)
- Teaching Assistant, University of California, Irvine (July 1999 March 2004)
- Adjunct, Christ's College (now Concordia University), Irvine, CA (September 1985 – June 1987)
- Adjunct, Southern California College, (now Vanguard University), Costa Mesa, CA (September 1984 – June 1985)

(From June 1987-June 2005, I was a home schooling parent.)

Teaching Background

Courses Taught

- MATH 5383 Topics in Applied Mathematics (Spring 2008, Spring 2016)
- MATH 5381 Applied Mathematics I (Fall 2007, Fall 2015)
- MATH 5341 Real Analysis I (Summer 2011)
- MATH 5311 Advanced Engineering Math (Fall 2006, Spring 2009, Spring 2010, Spring 2011, Spring 2012, Spring 2013, Spring 2014, Spring 2015, Spring 2015, Spring 2016, Sprin

- 2016, Spring 2017, Spring 2018, Spring 2019, Spring 2020, Spring 2021, Spring 2022, Spring 2023)
- MATH 4399 Independent Study (Fall 2013, Fall 2015, Fall 2020)
- MATH 4373 Applied Mathematics II (Fall 2014)
- MATH 4373 Partial Differential Equations (Fall 2020, Fall 2024)
- MATH 4342 Introduction to Complex Variables (Fall 2009, Fall 2022, Fall 2023)
- MATH 4341 Introduction to Real Variables (Fall 2005, Spring 2011, Spring 2018)
- MATH 4161 Senior Seminar II (Spring 2016)
- MATH 4160 Senior Seminar I (Spring 2010, Spring 2016)
- MATH 3452 Advanced Concepts of Mathematics (Spring 2011, Spring 2012)
- MATH 3425 Foundations of Mathematics (Spring 2008, Fall 2013, Fall 2015, Fall 2016, Fall 2021, Spring 2024, Fall 2025)
- MATH 3404 Multivariate Calculus (Fall 2011)
- MATH 3380 Algorithms in Applied Mathematics (Fall 2006)
- MATH 3373 Applied Mathematics I (Spring 2012, Spring 2014)
- MATH 3373 Advance ODEs (Spring 2020, Spring 2022)
- MATH 3365 Geometric Systems (Spring 2013, Spring 2014, Spring 2017, Spring 2019, Spring 2020, Spring 2024)
- MATH 3351 Probability and Statistics (Spring 2017, Fall 2023, Spring 2024)
- MATH 3345 Introduction to Analysis (Fall 2005, Fall 2010, Fall 2017, Fall 2019)
- MATH 3315 Linear Algebra and Matrix Theory (Summer 2007, Fall 2010, Fall 2011)
- MATH 3305 Ordinary Differential Equations (Fall 2008, Fall 2024)
- MATH 3203 Matrix Methods in Science and Engineering (Spring 2007, Fall 2007, Spring 2010, Fall 2010, Fall 2012, Fall 2013, Spring 2015, Fall 2015, Spring 2016, Fall 2016, Spring 2019, Fall 2025)
- MATH 3104 Multivariate Calculus Lab (Fall 2011)
- HNRS 2414 Honors Calculus II (Spring 2013, Spring 2023)
- MATH 2414 Calculus II (Spring 2005, Fall 2006, Fall 2007, Spring 2008, Fall 2008, Fall 2017)
- HNRS 2413 Honors Calculus I (Fall 2012, Fall 2022)
- MATH 2413 Calculus I (Fall 2005, Spring 2009, Fall 2009, Spring 2015)

- MATH 2330 Discrete Structures (Spring 2007)
- MATH 2312 Precalculus (Summer 2017, Fall 2017, Fall 2018, Fall 2019, Fall 2021, Fall 2024, Spring 2025)
- MATH 2114 Calculus II Lab (Fall 2007, Spring 2009)
- MATH 2113 Calculus I Lab (Spring 2015)
- MATH 1351 Concepts of Modern Mathematics II (Fall 2020, Fall 2021, Fall 2022, Fall 2023, Fall 2024, Fall 2025)
- MATH 1350 Concepts of Modern Mathematics I (Spring 2021, Spring 2022, Spring 2023, Spring 2024, Spring 2025)
- MATH 1343 Statistics II (Fall 2014)
- MATH 1342 Statistics I (Fall 2017, Spring 2018, Fall 2018, Spring 2019, Fall 2019, Spring 2020, Fall 2020, Spring 2021, Spring 2022, Fall 2024)
- MATH 1332 Contemporary Math I (Fall 2005)
- MATH 1332 Math for Liberal Arts (Fall 2021, Fall 2022)
- MATH 1325 Mathematics for Business & Economics II (Fall 2012, Fall 2016)
- MATH 1324 Mathematics for Business & Economics I (Fall 2013, Spring 2023)
- College Algebra (1985-1987)
- Physics I and II (1984-1985)

Mentoring

- Senior Seminar Mentor to at least 11 students
- Honors contract course mentor, 1 student
- Graduate Instructor teaching mentor
- Adjunct Instructor teaching mentor
- Master Advisor Training (Fall 2012-Spring 2013)
- 6 Thesis Committees, 5 in the School of Engineering and 1 in the Department of Mathematics

Teaching Enhancement

- Six Science-Supported Strategies for Effective Teaching and Learning UTT CETL (2024-2025)
- What Makes an Exceptional Teacher and How to Become One UTT CETL (2023-2024)
- Active Learning Strategies in STEM Classes UTT CETL (2022-2023)
- Designing Courses for Active Learning UTT CETL (2021-2022)
- Brain Targeted Teaching UTT Center for Excellence in Teaching and Learning (2020-2021)

- Using Mindfulness in Your Teaching UTT Center for Excellence in Teaching and Learning (2019-2020)
- Small Teaching -UTT Center for Excellence in Teaching and Learning (2018-2019)
- Read Teaching College by Normal Eng (2017-2018)
- Swoop-in Bystander Intervention Workshop UTT (2016-2017)
- Actively Engaging Students -UTT Center for Excellence in Teaching and Learning (2016-2017)
- Numerous videos on flipping the classroom (2014-2016)
- Flipping the Classroom UT Tyler Webinar (2014-2015)
- Making Calculus Fun MacMillan Higher Education Webinar(2014- 2015)
- Foundations in Online Learning and Instructional Outcomes 6 week UT Tyler Instructional Design course (2013 2014)
- Carl Wieman Seminars UT Tyler events (2013-2014)
- Increasing Student Motivation Cengage Webinar (2012-2013)
- Lunch Learn Share UT Tyler event (2012-2013)
- Faculty Learning Community UT Tyler group (Fall 2011 Spring 2012)
- Hybrid class training UT Tyler Instructional design course (Spring 2011 Fall 2011)
- Soft Chalk training UT Tyler Instructional design course (2010 2011)
- Camtastic training UT Tyler Instructional design course (2010 2011)
- 2 Workshops on Improving the Teaching of Analysis UT Arlington (2009 2010)
- MAA Texas Session Meeting (Spring 2009)
- Joint AMS/MAA Meeting (Spring 2009)
- Texas Undergraduate Research Conference (Fall 2008)
- MathFest MAA conference (Summer 2008)
- MAA Section Meeting (Spring 2008)
- AMS/MAA Joint Meeting (Spring 2008)
- MAA Texas Session Meeting (Fall 2007)
- Texas Next Meeting (Spring 2007)
- MAA Section Meeting (Fall 2006)
- Texas Next Meeting (Spring 2006)
- MAA Section Meeting (Spring 2005)

Course Development

- MATH 5311 Advanced Engineering Math
- MATH 5381 Applied Mathematics I (with Rebecca Culshaw)
- MATH 5383 Topics in Applied Mathematics (with Rebecca Culshaw)
- MATH 4160 Senior Seminar (with Rebecca Culshaw, Nathan Smith)
- MATH 3373 Applied Mathematics I (with Regan Beckham)
- MATH 4373 Applied Mathematics II (with Regan Beckham)

• MATH 1324/1325 – Ad hoc committee to revise the course

Selected Awards and Honors

- Pi Mu Epsilon (Mathematics Honor Society) (2017)
- Nomination for the Faculty Senate Distinguished Faculty Award 2012
- Nomination for Texas Section Award for Distinguished College or University Teaching of Mathematics, 2010.
- Nomination for White Fellowship Award at UT Tyler. 2008.
- University of California, Irvine, Medal Fellowship, 2005 (Highest award given to a graduate student at UCI. Award for contributions to UCI's mission, spirit and vision.)
- Outstanding Contributions to the Department of Mathematics Award, UCI, 2003-2004 (Award for research, teaching and service to the mathematics department.)
- T.A. Dissertation Fellowship (Fall 2004)
- Phi Beta Kappa (1982)
- Sigma Pi Sigma (Physics Honor Society) (1982)
- Earl P. Anthony Fellowship (1982)

Service

Committees

- Student Workers Committee (Department 2009-2014, 2015-present) Chair (2009-2010, 2011-2012, 2013-2014, 2015-present)
- Assistant Professor Hiring Committee (2023-2024)
- Visiting Lecturer Hiring Committee (2023-2024)
- VAP Hiring Committee (2023-2024)
- Lecture Promotion Committee (2023-2024)
- VAP Hiring Committee (2022-2023)
- Math Department Open House Committee (Department Summer 2021 Chair, 2022)
- Ad Hoc Lecturer Promotion Committee (Department 2021)
- On Course Development Committee (Department 2017- 2019) Chair (2017- 2019)
- Awards Committee (Department 2016 2017)

- Student Success Taskforce (Summer 2016 Summer 2017)
- Advising Subcommittee to the Student Success Taskforce (Fall 2016 Summer 2017)
- Teaching Toolbox Subcommittee to the Student Success Taskforce (Fall 2016 Summer 2017)
- Tenure and Promotion Committee (Department Fall 2011 2017)
- Curriculum Committee (Fall 2009 Spring 2014) Chair (2009-2010, 2012-2013, 2014-2015)
- Governance Committee (Department 2014)
- Leadership Initiative Task Force (Fall 2013-Spring 2014)
- Search Committee (Department 2013-2014) Chair
- Undergraduate Council (Fall 2012 Spring 2014)
- Department of Chemistry Tenure and Promotion Committee (Fall 2012-2014)
- Undergraduate Assessment Committee (Fall 2012 Spring 2014)
- Undergraduate Council Subcommittee UG Curriculum (Fall 2011-Spring 2014) Chair 2013-2014
- Undergraduate Council Core Curriculum Committee (Fall 2011 Spring 2014) Chair 2012-2013 Responsible for the implementation of the new Core
- Student Affairs Advisory Committee (Fall 2008 Spring 2011) Chair 2010-2011
- Sonya Kovalevsky Day Committee (Spring 2007-2011) Chair 2009
- Governance Committee (Fall 2008 Spring 2010) Chair 2009-2010
- Education Committee (Fall 2009-Spring 2010)
- Search Committee for Chair of Mathematics Department (Department 2007-2008)
- Graduate Committee (Department 2007-2008)
- Education Liaison Committee (Department 2007-2008)
- Student Lounge Committee (Department 2008)
- Search Committee for Chair of Mathematics Department (2006-2007)
- Graduate Committee (Department 2006-2007)
- Education Liaison Committee (Department 2006-2007)
- Engineering Liaison Committee (Department 2006-2007)
- Undergraduate Committee (Department 2005-2006)
- Engineering Liaison Committee (Department 2005-2006)

Other Non-Committee University Service

- Mentoring of New Faculty (2024 2025)
- Lyceum Point Tallier (2025)
- Texas Undergraduate Math Conference Crowd Manager (2024)
- Class Coordinator MATH 2312 (2024-2025)
- Top 25% Showcase (2024 2025)
- Judged at Lyceum (2023)
- Updated Undergraduate Math Handbook (2022)
- Stop the Bleed First Aid Training (2022)
- Math Club Talk (2022)
- Top 25% Showcase (2021)
- Advisor to the SIMIODE competition (Systemic Initiative for Modeling Investigations and Opportunities with Differential Equations (2021 -2022)
- Led the effort to create a Math Department Undergraduate Handbook (2021)
- Mentored multiple Graduate and Adjunct Instructors (2017-2021)
- Math Club Advisor (Department 2020-2021)
- Created a Canvas website for the Math Club (2020-2021)
- Math Club Presentations (2005, 2007, 2011, 2012, 2013, 2015, 2017, 2020)
- Presented talk on Teaching Triangles for UTT Center for Excellence in Teaching and Learning (2019)
- Created Canvas website for the Mathematics Learning Center (2018-2019)
- Wrote an employee handbook for the Mathematics Learning Center (2018-2019)
- Created Canvas website for MLC tutors (2018-2019)
- Participated in Patriot Preview Day Showcase (2016)
- Wrote Mathematics Learning Center program review documentation (2016)
- Mathematics Department Academic Advisor (2006-present)
- Business Math Coordinator (Fall 2012-Fall 2014, Fall 2015-present)
- Calculus Coordinator (Spring 2015)
- Math Club Advisor (2007-2014)
- Conducted Fundamentals of Engineering review sessions in Mathematics for the School of Engineering 2013.

- Presentation to the Faculty Eat and Learn Meeting on the new Core Curriculum 2013
- Ran information booth at Patriot Preview Day (Spring 2007, 2009, 2010, 2013)
- Peer Advisor 2012
- Presentations to Student Learning Communities and PASSages groups on the Mathematics Learning Center 2012-2013
- Presentation to the Master Advisor class on the Mathematics Learning Center 2012
- Presented talks at Sonya Kovalevsky Day, assisted in planning and supervision of the events. (Spring 2006, Spring 2007, Spring 2008, Spring 2009, Spring 2010, Spring 2011)
- Registration at High School Math Competition (Fall 2010)
- Took part in Freshman Orientation 2009
- Establishment of Graduate Teaching Award (2008)
- Coordinator Matrix Methods, Calculus II and Calculus II Lab (2007-2008)
- Promotion of Mathematics Minor (2007 2008)
- Coordinator Calculus II (2006-2007)
- Attended a meeting of the Texas Space Grant Consortium at Southwest Research Institute in San Antonio to get information on scholarships for students (November 2-3, 2006)
- Escorted students to the Senior Etiquette Dinner (November 2005)
- Toured Palestine NASA Balloon Facility to get information on opportunities for students (Fall 2005)
- Assisted in student preparation and administration of Putnam Exam (Fall 2005)

Professional Service

- Registration and other volunteer work for the Texas Undergraduate Mathematics Conference (Fall 2019)
- Session chair and volunteer for the Texas Undergraduate Mathematics Conference (Fall 2015)
- Book Chair for the Conference for the Advancement of Teaching MAA (Summer 2010 Spring 2014)
- Registrar for the Texas Undergraduate Mathematics Conference (Fall 2010)
- Beta Tester for An NSF Grant on Learning Materials for a First Course in Real Analysis (Summer 2010- Spring 2011)
- Chaired Section at 2009 Texas Undergraduate Research Conference 2010

- Refereed 4 papers for the Proceedings of the 42nd Annual SSST conference 2010
- Chaired Section at 2009 Texas Undergraduate Research Conference
- Chair MAA General Contributed Papers Session AMS/MAA meeting (Spring 2009)
- Chair MAA Session on Mathematical Physics AMS/MAA meeting (Spring 2009)
- Referee Applied Optics Journal (Spring 2008)

Community Service

- Organized a Math Department food drive for Patriot Pantry (2020)
- Judge and Grader MathCounts Regional Competition (February 2016)
- Judge, MathCounts Regional Competition (February 2014)
- Judge and Grader, MathCounts Regional Competition (February 2014)
- Judge and Grader, MathCounts Regional Competition (February 2013)
- Judge and Grader, MathCounts Regional Competition (February 2012)
- Invited Talk Tyler Junior College (Spring 2012)
- Gave a talk at Science and Math Day Brookhill High School (2011)
- Judge and Grader, MathCounts Regional Competition (February 2011)
- Judge and Grader, MathCounts Regional Competition (February 2010)
- Judge and Grader, MathCounts Regional Competition (February 2009)
- Speaker, Expanding your Horizons Conference Tyler Junior College (Spring 2009
- Judge and Grader, MathCounts Regional Competition, UTT, (February 2008).
- Conducted a workshop for teachers at the National Council of Teachers of Mathematics Regional Conference (with John Lamb), "Patterns in our World: Activities to Help Guide Students' Understanding," Houston (November 2007)
- Conducted a seminar for gifted children (with John Lamb) "Patterns in our World" (March 2006)
- Judge, MathCounts Regional Competition, UTT, (February, 2006)
- Grader, MathCounts Regional and State Competitions, Southern California (Spring 2003, Spring 2004)
- Established and coached a MathCounts group for home schooled students, Albuquerque, NM (1994-1997)
- Served as registrar and member of the planning committee for the 1996 New Mexico Family Educators Conference (over 500 attendees).
- Cub Scout Leader, Albuquerque, NM (1990-1995)

Research Interests

• Spectral Theory of Schrodinger operators and quasiperiodic Jacobi matrices

- Modeling the behavior and energy levels of electrons in a two dimension crystal immersed in a perpendicular magnetic field
- Acousto-optics
- Antenna design
- Other applications of Mathematical Physics

Publications – All refereed

• (with S. Jitomirskaya, M.S. Schulteis), Continuity of the Lyapunov exponent for quasiperiodic cocycles, *Ergodic Theory and Dynamical Systems*, 29, Issue 6, 1881-1905, (2009)

This paper was originally intended to show the work done by M.S. Schulteis in her dissertation. She and I did preliminary work together which led to this paper. However, in the original version of the paper, M. S.

- (with R. Pieper and H. Ndwata) Combined phased array and Hamming sound apodization techniques to improve acousto-optic diffraction bandwidth, *Proceedings of the 41st Southeastern Conference on System Theory*, (2009)
- (with R. Pieper and T.-C. Poon) Exact solution for four-order acousto-optic Bragg diffraction with arbitrary initial conditions, *Applied Optics*, 48, Issue 7, C141-C150 (2009)
- Jacobi Operators with singular continuous spectrum, *Lett. Math. Phys.* **71** 123-134 (2005).
- (with S. Jitomirskaya, M.S. Schulteis), Localization for a family of one dimensional quasiperiodic operators of magnetic origin, *Annales Henri Poincaré* 6 103-124 (2005).

Conference Organization

- (chair R. Pieper) Committee member 42nd IEE Southeastern Symposium on System Theory
- (with K. Mahdavi, L. Kauffman, S. Lomanaco) Conference on Representational Theory, Quantum Field Theory, Category Theory, Mathematical Physics and Quantum Information Theory, University of Texas Tyler, September 20 23, 2007.
- (with K. Mahdavi) The AMS has provisionally agreed to publish the proceedings of the above conference in their Contemporary Mathematics Series. Dr. Mahdavi and I will be editors.

Presentations

- "Quantum Picturalism", MAA section Meeting Spring 2010
- Faculty Research Day, Fall 2008
- (with J. Lamb) "The Patterns of our World: Activities to Help Guide Students' Understanding," National Council of Teachers of Mathematics Regional Meeting, November 30, 2007.
- "Bloch Electron in a Perpendicular Magnetic Field," Texas Regional Meeting of the MAA, April 7, 2006.
- Western States Mathematical Physics Meeting, March 14, 2005.
- Sienna College, Department Seminar, February 16, 2005.
- Mississippi University for Women, Department Seminar, February 11, 2005.
- California State University, Dominguez Hills, Department Seminar, February 8, 2005.
- Rose Hulman Institute of Technology, Department Seminar, February 3, 2005.
- University of Texas, Tyler, Department Seminar, January 31, 2005.
- Joint AMS-MAA Mathematics Meeting, AMS Special Session on Analysis Problems in Modern Physics, January 5-8, 2005.
- California Institute of Technology, Mathematical Physics Seminar, October 19, 2004.
- Joint AMS-IMS-SIAM Summer Research Conference on Spectral and Inverse Spectral Theory of Jacobi Matrices, Snowbird, Utah, June 8-12, 2003.
- Conference on Spectral Analysis in Geometry and Physics, University of California, San Diego, January 3-5, 2003.

Grants and Proposals

Internal

- Faculty Research Grant, "Cantor Spectrum for the Generalized Almost Mathieu Operator," awarded 2006-2007.
- Junior Faculty Summer Research Stipend, awarded Summer 2006.

External

- (Mathematics Department) AMS REU Site, not funded
- "Academic Year Mini-REU", Center for Undergraduate Research in Mathematics (Funded by NSF), 2008. Not funded.
- (18 member interdisciplinary group from Physics, Engineering, Economics, Chemistry, Mathematics, Sociology, Criminal Justice, Computer Sciences, and Psychology, chaired by Nary Subramanian) Exploratory team to bid "Emerging Frontiers in Research and Innovation Resilient and Sustainable Infrastructures," 2008, not funded

- (with Kazem Mahdavi) "Four day Mathematical Physics Conference," NSF, awarded 2007.
- (with Kazem Mahdavi, Rebecca Culshaw, Casey Mann) "Two Week Intensive Mathematics Refresher Course for Entering Graduated Students," NSF, 2005-2006 not funded.
- (with Kazem Mahdavi, Rebecca Culshaw) "Mathematical Colloquium Series," NSF, 2005-2006, not funded.
- "Travel funds for American Woman in Mathematics Seminar," AWM, 2005 not funded.