

CURRICULUM VITA

KRISTOFER DAVID JORGENSEN

Address and Phone:

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Current rank: Associate Professor

EDUCATION

Ph.D. Mathematics New Mexico State University, Las Cruces, 1999
 Thesis: *On Classes of Examples of Additive Group Actions on \mathbf{C}^4*
 (Adviser: David R. Finston)
M.Ed. Mathematics Texas State University - San Marcos, 1991
B.M. (Bachelor of Music) Texas State University - San Marcos, 1985

PROFESSIONAL EXPERIENCE

April 2009-Present Associate Professor of Mathematics, Sul Ross State University (SRSU), Alpine, Texas
2004-April 2009 Assistant Professor of Mathematics, SRSU, Alpine, Texas
2002-2004 Assistant Professor of Mathematics, University of the Incarnate Word (UIW), San Antonio, Texas
2000-2002 Mathematics Editor, LaurelTech Integrated Publishing Services, Redwood City, California, Edited mathematics textbooks and solution manuals for the college and high school levels
1999-2000 Visiting Assistant Professor of Mathematics, Texas Lutheran University (TLU), Seguin, Texas
Summer 1999 College Assistant Professor of Mathematics, New Mexico State University (NMSU), Las Cruces, New Mexico
1993-1999 Graduate Assistant, Department of the Mathematical Sciences, NMSU
1993-1998 Instructor of self-paced mastery classes, tutor, and grader, Mathematics Learning Center, NMSU
1991-1992 Mathematics Instructor, Austin Community College (ACC), Rio Grande and Eastridge Campuses, Austin, Texas
1992 Teaching Assistant, lab sections for mathematics courses, tutor, Math-Science Tutoring Center, Parallel Studies Department, ACC
1988-1991 Instructional Assistant, tutor in Mathlab, grader, Texas State University - San Marcos

Refereed Journal Articles

Jorgenson, K.D. Applications of translations on \mathbf{C}^3 and \mathbf{C}^4 to motion in real space. *International Journal of Pure and Applied Mathematics*, Volume 47, No. 2 2008, 207-224

Jorgenson, K.D. A note on a class of rings found as G_a -invariants for locally trivial actions on normal affine varieties. *Rocky Mountain Journal of Mathematics*, 2004, 34(4), 1343-1352.

Jorgenson, K.D. On twin-triangular additive group actions on \mathbf{C}^4 . *Communications in Algebra*, 2001, 29(8), 3559-3570.

TEACHING

Teaching Awards

Recommended by Chair of Department and Dean for Meritorious ranking 2010
Recommended by Chair of Department and Dean for Meritorious ranking 2009
Recommended by Chair of Department and Dean for Meritorious ranking 2008
Recommended by Chair of Department and Dean for Merit ranking 2007
Recommended by Chair of Department and Dean for Merit ranking 2006
Recommended by Chair of Department and Dean for Merit ranking 2005

Courses Taught and Prepared

Sul Ross State University

<u>Course</u>	<u>Title (content)</u>
Math 4330	Modern Algebra I
Math 4331	Modern Algebra II
Math 4320	Introduction to Real Analysis I
Math 3350	Math History
Math 3340	Foundations of Higher Mathematics
Math 3320	Differential Equations
Math 2413	Calculus I (differential calculus)
Math 2330	Linear Algebra
Math 2310	Foundations of Elementary Mathematics I
Math 2311	Foundations of Elementary Mathematics II
Math 1342	Statistics
Math 1325	Business Calculus
Math 1316	Trigonometry
Math 1315	University Algebra
Math 1310	Introduction to University Mathematics

TexPREP Program Taught three math/science courses to middle school students during the first half of a 7-week term as part of the summer TexPREP program which exposes local middle school students to science and mathematics topics, SRSU June, July 2008

University of the Incarnate Word

<u>Course</u>	<u>Title (content)</u>
Math 6311	Advanced Abstract Algebra I (group theory)
Math 6312	Advanced Abstract Algebra II (ring theory)
Math 4399	Selected Topics course in linear programming
Math 3325	Abstract Algebra and Number Theory
Math 2313	Calculus II (integral calculus)
Math 2322	Linear Algebra (linear systems, matrices, vectors)
Math 1304	College Algebra

Texas Lutheran University

<u>Course</u>	<u>Title (content)</u>
Math 133	College Algebra
Math 138	Elementary Functions (pre-calculus)
Math 136	Business Calculus

New Mexico State University

<u>Course</u>	<u>Title (content)</u>
Math 142G	Calculus for Biological and Management Sciences I
Math 191	(Engineering) Calculus I
Math 235	Calculus I for the Engineering Technical Student
Math 230	Linear Algebra (linear programming)

Austin Community College

<u>Course</u>	<u>Title (content)</u>
M 1643	Math for Business and Economics (finite math)
M 1423	Intermediate Algebra

Papers Presented at Professional Meetings

Invited lecture - Jorgenson, K.D. (2008, August). *Applications of translations on \mathbf{C}^3 and \mathbf{C}^4 to motion in real space*. Presented to Fifth International Conference of Applied Mathematics and Computing, Plovdiv, Bulgaria.

Jorgenson, K.D. (2003, January). *Translations of data points in \mathbf{R}^3* . Preliminary report. Presented to American Mathematical Society (AMS)-Mathematical Association of America (MAA) Joint National Conference, Baltimore, Maryland.

Jorgenson, K.D. (2001, January). *A note on a class of rings found as G_a -invariants of locally trivial actions on normal, affine varieties*. Presented to AMS-MAA Joint National Conference, New Orleans, Louisiana.

Jorgenson, K.D. (2000, August). *On twin-triangular additive group actions on \mathbf{C}^4* . Presented to MAA Mathfest 2000, Los Angeles, California.

Seminar Lectures Presented

Using Vectors to Find Curves of Best Fit and Other Applications, SRSU Mathematics/Computer Science Seminar, Spring 2010

Generalizations of the Fibonacci Sequence and the Golden Ratio Used to Find Dense Sets of Real Numbers, SRSU Mathematics/Computer Science Seminar, Fall 2009

Applications of translations on \mathbf{C}^3 and \mathbf{C}^4 to motion in real space SRSU Mathematics/Computer Science Seminar, Spring 2009

The Postage Stamp Problem and Diophantine Equations, SRSU Mathematics/Computer Science Seminar, Fall 2008 and Fall 2005

Geometric Constructions and Non-Constructible Numbers SRSU Mathematics/Computer Science Seminar, Spring 2008 and Fall 2004

A Hidden Connection Between Euler's Phi Function and the Chinese Remainder Theorem, SRSU Mathematics/Computer Science Seminar, Fall 2007

A New Application of Invariant Theory, SRSU Mathematics/Computer Science Seminar, Spring 2007

Math Magic: The Principle of Hidden Distribution, SRSU Mathematics/Computer Science Seminar, Fall 2006

Things I Learned in Math 1310, SRSU Mathematics/Computer Science Seminar, Spring 2006

A Brief History of Relativity Till 1905—In honor of the centenary year of Einstein's Special Theory, SRSU Mathematics/Computer Science Seminar, Spring 2005 repeated Spring 2007

Nonfinitely generated rings of G_a -invariants, Algebra Seminar, New Mexico State University (NMSU) 1999

Can a normal domain be constructed with an ideal for which the ideal-transform is a nonfinitely generated ring of invariants?, Graduate Seminar, NMSU 1997

Cohen-Macaulay partially-ordered sets (part of study series), Algebra Seminar, NMSU 1996

Primality Testing, Algebra Seminar, NMSU 1996

The phi number system, Graduate Seminar, NMSU 1996

Hilbert's finite basis theorem, Graduate Seminar, NMSU 1995

The Alexander horned-sphere (second of two-part study series), Graduate Seminar, NMSU 1995

Counting covers of analytic functions, Graduate Seminar, NMSU 1994

Grants

Computer Science and Mathematics Departmental representative in a USDA grant of the TexPREP program written by Rio Grande Research Center Sul Ross State University for the purpose of exposing local middle school students with mathematical aptitude to topics in science and mathematics Jan. 2007

Worked with SRSU grants coordinator in planning necessary details for the implementation of the TexPREP program 7-week term summer 2008 beginning Aug. 2007. This included recruiting the other instructor (in addition to myself) for the program and recruiting one of two Program Assistant Mentors to assist with students in the classroom.

Invited participant, MathNerds mathematics education tutoring program grant involving Lamar State University, Texas State University (TSU) - San Marcos, and Sul Ross State University, San Marcos 2006.

Invited participant of mathematics and education professors from the Texas State University System (TSUS) involved in the Texas Education Association Mathematics for English Language Learners (MELL) grant, San Antonio 2005.

Projects in Mathematics Textbook Publishing

Editing, accuracy-checking text and back-of-book answers for textbook series in *College Algebra*, *Algebra and Trigonometry*, *Pre-Calculus*, *Trigonometry* by M. Sullivan and M. Sullivan, Prentice-Hall Publishing, while working for Laurel-Tech Integrated Publishing Services, 2000-2001

Editing, accuracy-checking of ancillaries (student solution manual and instructor resource guide) and back-of-book answers to the textbook series *Finite Mathematics*, *Calculus with Applications*, and *Finite Mathematics and Calculus with Applications*, by Lial, Greenwell, Ritchey, Addison-Wesley Publishers, while working with Laurel-Tech Integrated Publishing Services, 2001-2002

Editing, accuracy-checking of ancillaries (student solution manual and instructor resource guide) to the textbook *Understandable Statistics*, by Brase and Brase, Houghton-Mifflin Publishers, while working for Laurel-Tech Integrated Publishing Services, 2001-2002

For complete vita, see <http://faculty.sulross.edu/kjorgenson/> .