

Susan Elle

CONTACT INFORMATION	University of California, San Diego Department of Mathematics 9500 Gilman Drive La Jolla, CA 92093 selle@ucsd.edu
RESEARCH AREA	Noncommutative Ring Theory with Applications in (Noncommutative) Algebraic Geometry I study iterated Ore extensions of dimension 5 and Artin-Schelter regular algebras.
EDUCATION	University of California, San Diego (expected) Spring 2016 Ph.D. in Pure Mathematics Advisor: Dan Rogalski University of California, San Diego C.Phil in Pure Mathematics Fall 2014 M.A. in Pure Mathematics Spring 2013 Western Washington University Spring 2009 B.S. Cum Laude, Mathematics B.A. Cum Laude, Spanish
TALKS	Classification of dimension 5 graded iterated Ore extensions July 2015 Workshop on Geometric Algebra. Fields institute, Toronto Canada An introduction to Hopf algebras and IHOE's June 2015 Informal noncommutative algebra seminar. UC San Diego Ore extensions of global dimension 5 April 2015 AMS sectional meeting. University of Nevada, Las Vegas Special Session on New Developments in Noncommutative Algebra, III Advancement to Candidacy Nov 2014 UC San Diego
PUBLICATIONS AND PREPRINTS	Susan Elle , A classification of relation types of Ore extensions of dimension 5, <i>ArXiv e-prints 1512.03378</i> Dec 2015
HONORS AND AWARDS	2015 Summer Graduate Teaching Scholar Winter 2015 to Summer 2015 Awarded to 2 mathematics graduate students based on teaching evaluations and demonstrated interest in teaching. <ul style="list-style-type: none">• Participant in “The College Classroom,” a 10 week program that covers teaching pedagogy with topics such as active learning, developing expertise, and metacognition.• Trained in learning management systems such as Blackboard and other online resources.• Received CIRTLL (Center for the Integration of Research, Teaching, and Learning) Practitioner award for presentation of results of original research on education. GAANN Fellowship Nominee Fall 2012

San Diego (Diversity) Fellowship Fall 2011
Awarded for demonstrated commitment to increasing educational access for under-represented students

James B. Ax Fellowship Fall 2011

TEACHING
EXPERIENCE

Associate instructor

Mathematics Department, UC San Diego

- Instructor for precalculus (Math 3C) Winter 2015

I was the instructor of record for a class of about 80 students. I lectured 4 times a week, set a calendar and course curriculum, designed and maintained a course website, assigned homework, supervised two teaching assistants, wrote exams, and entered grades.

- Instructor for multivariable calculus (Math 10C) Summer 2015

I was the instructor of record for a class of about 110 students. I lectured 3 times a week. In addition to the responsibilities listed above, I facilitated group discussion and conducted a formal study on the relative efficacy of online homework by designing comparable written and online assignments and studying the performance of students completing written assignments against that of students completing online homework.

Teaching Assistant

Fall 2011 to Present

Mathematics Department, UC San Diego

- Graduate Abstract Algebra II (Math 200B)
- Teaching and Learning Math II (Math 121B)
- Modern Algebra II (Math 103B)
- Abstract Algebra I (Math 100A)
- Mathematical Reasoning, Introduction to Proofs (Math 109)
- Linear Algebra for Science and Engineering (Math 20F)
- Multivariable Calculus for Science and Engineering (Math 20C)
- Integral Calculus for Science and Engineering (Math 20B)
- Differential Calculus for Science and Engineering (Math 20A)
- Multivariable Calculus (Math 10C)
- Integral Calculus (Math 10B)

English as a Second Language Instructor

Feb 2011 to July 2011

Guangdong Peizheng College, Guangzhou China

English conversation instructor for classes with 20-30 students; wrote curriculum designed to facilitate student conversation in English, led student discussions, reviewed grammar rules and vocabulary, designed and evaluated oral examinations.

Third Grade Teacher

Sept 2011 to Jan 2011

Escuela Maureen Courtney, Nicaragua

See details under "Service"

SERVICE

Cap Corps Volunteer

Aug 2009 to Feb 2011

Escuela Maureen Courtney and Colegio Nino Jesus, Nicaragua

- Third Grade Teacher; designed and administered a curriculum in compliance with national standards, wrote and evaluated tests, handled issues with student discipline, identified struggling students and provided additional tutoring outside of normal class hours.
- Classroom assistant; assisted the teachers of grades 1-6 during math instruction, taught and reviewed basic math, provided practice problems and individual feedback to students.
- PE Instructor; Led participation in soccer games during classes' scheduled phys-

ical education times, organized a school team which competed against other teams in the city.

- Tutor; provided one-on-one math and Spanish tutoring to remedial students.
- Translator; translated donated English books into Spanish to provide students with resources to learn to read Spanish.
- College prep assistant; assisted in after school math tutoring for high school students preparing to take college entrance exams.

PROGRAMMING Mathematics (intermediate)
 Matlab (novice)
 Python (novice)

LANGUAGES English (native)
 Spanish (fluent; non-native)