

Tynan Kelly

Positions

- 2015-Present **University of Nevada, Reno**
Teaching Associate Professor 2021-Present (Graduate Faculty 2017-Present)
Teaching Assistant Professor 2019-2021
Lecturer II 2015-2019

Education

- 2015 **Ph.D., Mathematics, Brandeis University**
Thesis: *Twisted Linking Numbers and Casson-Gordon Invariants*
Adviser: Daniel Ruberman
- 2010 **M.S., Mathematics, University of Nevada, Reno**
Thesis: *Rational Witt Classes of 4-Stranded Pretzel Knots*
Adviser: Stanislav Jabuka
- 2008 **B.S., Mathematics, University of Nevada, Reno**
Minor: Economics

Certifications

- 2020 **Certificate in Effective Instruction, Association of College and University Educators**

Teaching Experience

University of Nevada, Reno

Instructor

Modern Algebra II, MATH 732

Spring 2022

Linear Algebra II, MATH 430/630

Fall 2021

Groups, Rings, and Fields, MATH 331

Fall 2018

Introduction to Analysis II, MATH 311

Fall 2020

Introduction to Analysis I, MATH 310

Fall 2022; Spring 2020; Summer 2020, 2021

Linear Algebra, MATH 330

Spring 2017, 2021; Summer 2017, 2018, 2019

Introduction to Mathematical Reasoning, MATH 302

Spring 2019

Introduction to Proofs, MATH 301

Spring 2018; Summer 2016, 2017, 2018

Proof Writing for Math & Stat Majors, MATH 295

Fall 2018; Summer 2019, 2020, 2021

Differential Equations, MATH 285

Spring 2021, 2023

Calculus III, MATH 283

Fall 2017, 2020, 2021, 2022; Spring 2017, 2018, 2019, 2020, 2021, 2022, 2023; Summer 2021, 2022

Calculus II, MATH 182

Fall 2016, 2019

Calculus I, MATH 181

Fall 2018, 2019

Business Calculus, MATH 176

Spring 2016

Precalculus I, MATH 126

Fall 2015, 2016, 2017

Introduction to Statistics, STAT 152

Fall 2015, 2016; Spring 2016; Summer 2018

[Brandeis University](#)

[Instructor](#)

Biostatistics, BIOL 51A

Summer 2012, 2014, 2015

[Graduate Teaching Fellow](#)

Techniques of Calculus (a), MATH 10A

Fall 2011, 2012

Techniques of Calculus (b), MATH 10B

Spring 2012, 2013

[Graduate Course Assistant](#)

Differential Geometry, MATH 102A

Spring 2015

Introduction to Real Analysis, Part I, MATH 110A

Fall 2014

Introduction to Proofs, MATH 23B

Spring 2014

Calculus of Several Variables, MATH 20A

Fall 2013

Introduction to Probability and Statistics, MATH 8A

Spring 2011

Applied Linear Algebra, MATH 15A

Fall 2010

Belmont Hill School

Instructor

Algebra II/Precalculus Workshop

Summer 2011

Precalculus

Summer 2012, 2014

Geometry

Summer 2013

Statistics

Summer 2014, 2015

University of Nevada, Reno

Instructor

Calculus I, MATH 181

Summer 2010

Fundamentals of College Mathematics, MATH 120

Summer 2009

Graduate Teaching Assistant

Precalculus II, MATH 127

Spring 2010

Precalculus I, MATH 126

Fall 2009

Calculus II, MATH 182

Spring 2009

Calculus I, MATH 181

Fall 2008

Awards & Fellowships

- 2012-13 **Mathematics Teaching Award**, *Department of Mathematics*
Brandeis University
- 2010-13 **GAANN Fellowship**, *Department of Mathematics*
Brandeis University
- 2010 **Excellence in Teaching Award**, *Department of Mathematics & Statistics*
University of Nevada, Reno

2009-10 **Jerry and Betty Wilson Scholarship in Mathematics**, *Department of Mathematics & Statistics*
University of Nevada, Reno

Publications and Preprints

1. S. Jabuka and T. Kelly, *The non-orientable 4-genus for knots with 8 or 9 crossings*, *Algebr. Geom. Topol.* 18-3 (2018), 1823–1856. <https://doi.org/10.2140/agt.2018.18.1823>
2. T. Kelly, *Linking numbers in cyclic branched covers of S^3 and Casson-Gordon invariants*, in preparation.

Talks

AMS Fall Western Sectional Meeting, *University of Denver*, Fall 2016
Special Session on Floer Theoretic Invariants of 3-manifolds and Knots

Pure Math Seminar, *University of Nevada, Reno*, Fall 2015

Mathematics Colloquium, *University of Nevada, Reno*, Spring 2015

AMS Fall Western Sectional Meeting, *San Francisco State University*, Fall 2014
Special Session on Interactions between Knots and Manifolds

Topology Seminar, *Brandeis University*, Summer 2014

Graduate Student Seminar, *Brandeis University*, Fall 2013

Topology Seminar, *Brandeis University*, Fall 2012

Second Year Seminar, *Brandeis University*, Spring 2012

Topology Seminar, *Brandeis University*, Spring 2012

Graduate Student Seminar, *Brandeis University*, Fall 2010

Topology Seminar, *George Washington University*, Spring 2010

Conferences Attended

Nearly Carbon Neutral Geometric Topology Conference, *Virtual Conference*, Fall 2022

AMS Fall Western Sectional Meeting, *University of Denver*, Fall 2016

Conference on the Geometry and Topology of Symplectic 4-Manifolds, *University of Massachusetts, Amherst*, Spring 2015

AMS Fall Western Sectional Meeting, *San Francisco State University*, Fall 2014

FRG Workshop on Topology & Invariants of Smooth 4-Manifolds, *Simons Center for Geometry and Physics, Stony Brook University*, Summer 2014

Current Developments in Mathematics, *Harvard University*, Fall 2013

Workshop and Conference on Group Actions on Smooth 4-Manifolds, *University of Massachusetts, Amherst*, Fall 2013

11th Annual Graduate Student Topology & Geometry Conference, *University of Notre Dame*, Spring 2013

Computer Skills

LaTeX (Expert)	C++/Objective-C (Beginner)
Mathematica (Intermediate)	Swift/SwiftUI (Beginner)
Python (Beginner)	R (Beginner)