

CATIE ACITELLI, PHD

Department of Applied and Computational Mathematics and Statistics

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EDUCATION

North Carolina State University 2018-2022
Master of Science in Mathematics 2020
PhD in Mathematics 2022
Mathematics Education PhD Minor Raleigh, NC
Advisor: Dr. Ernest Stitzinger

University of North Carolina at Charlotte 2017-2018
Post-Baccalaureate Coursework: Matrices & Linear Algebra, Charlotte, NC
Differential Equations, Probability & Statistics I, Intro to Modern Algebra

North Carolina State University 2008-2012
Bachelor of Science in Mathematics, Cum Laude Raleigh, NC
Bachelor of Science in Secondary Mathematics Education, Cum Laude

TEACHING EXPERIENCE

Assistant Teaching Professor 2022-present
University of Notre Dame Department of Applied and Computational Mathematics and Statistics

- ACMS 10550: Applied Calculus I
- ACMS 20340: Statistics for Life Sciences
- ACMS 20550: Introduction to Math Methods I
- ACMS 40100: Mathematical Cryptography with Python

Instructor of Record 2018-2022
North Carolina State University Department of Mathematics

- MA 121: Elements of Calculus (4 times)
- MA 231: Calculus for Life and Management Sciences B (3 times)
- MA 405: Introduction to Linear Algebra (3 times)

Recitation Leader, Teaching Assistant, Grader 2009-2012, 2018-2022
North Carolina State University Department of Mathematics

- MA 114: Introduction to Finite Mathematics with Applications (TA)
- MA 121: Elements of Calculus (TA)
- MA 131: Calculus for Life and Management Sciences A (Recitation)
- MA 141: Calculus I (TA 3 times, Recitation)
- MA 231: Calculus for Life and Management Sciences B (Recitation)
- MA 241: Calculus II (TA 10 times, Recitation 2 times)
- MA 242: Calculus III (Grader)
- MA 405: Introduction to Linear Algebra (TA)

High School Teacher 2012-2018
Providence High School (2013-2018)

- Foundations of Math I, Math I, Foundations of Math III, Math III, Honors Math III, Advanced Functions & Modeling (Team Lead), Honors Pre-Calculus

Vance High School (2012-2013)

- Geometry, Math II, Math III, Advanced Functions & Modeling (Team Lead), AP Calculus AB/BC

Student Teacher 2012
JF Webb High School of Health and Life Sciences

- Algebra I, Honors Geometry, AP Statistics, AP Calculus AB/BC, Spanish I

HONORS AND AWARDS

Project NExT Fellow Mathematical Association of America	2022-present
“Thank a Teacher” Recipient Notre Dame Learning Kaneb Center	2022
Graduate School Summer Fellowship North Carolina State University Graduate School	2022
“Thank a Teacher” Recipient North Carolina State University Office of the Provost	2022
Maltbie Teaching Award North Carolina State University Mathematics Department	2021
Outstanding Teaching Assistant North Carolina State University Graduate School	2021
Preparing the Professoriate Fellow North Carolina State University	2020-2021
Faculty Appreciation Dinner Guest North Carolina State University	2020
Most Valuable Teacher Providence High School	2018
Most Valuable Teacher Zebulon B. Vance High School	2013
Most Effective Use of Classroom Technology Zebulon B. Vance High School	2013
PAMS Senior Leadership Award North Carolina State University College of Physical and Mathematical Sciences	2012
North Carolina Teaching Fellow North Carolina State University	2008-2012
Leader of the Pack Finalist North Carolina State University	2009-2010
Martha Guy Summer Institute for Future Business Leaders Appalachian State University	2007

DISSERTATION RESEARCH

The Design of a Cryptography Course with Python and SageMath
North Carolina State University, advised by Dr. Ernest Stitzinger

RESEARCH INTERESTS

- Undergraduate accessibility of post-quantum mathematical Cryptography
- Secondary and post-secondary curriculum development and evaluation

SERVICE & MENTORING EXPERIENCE

Graduate Student Representative, Diversity, Equity, & Inclusion Committee 2021-2022
North Carolina State University Mathematics Department

Mentor, AMS Graduate Student Chapter North Carolina State University Mathematics Department	2020-2022
Executive Team Member, Undergrads Union Grads North Carolina State University Mathematics Department	2020-2022
Mentor, Undergrads Union Grads North Carolina State University Mathematics Department	2019-2022
Organizer, HBCU Student Tours Providence High School	2016-2017
Club Advisor, Youth Commission International Providence High School	2015-2018
Organizer, Todd Fuller Math Competition North Carolina State University	2010-2013
Team Lead, Teaching with Technology Committee Vance High School	2012-2013
Co-chair, Teaching Fellows Fundraising Committee North Carolina State University College of Education	2010-2011
Co-founder, Active Community Teens North Carolina State University	2009-2010
Mentor, Determined Area Youth North Carolina State University	2009-2010
Education Advisor, Students Advocating for Youth North Carolina State University	2009-2010
Mentor, Students Advocating for Youth North Carolina State University	2008-2009

PRESENTATIONS AND PANELS

Cryptography for SK Day North Carolina State University, AWM	2022
What are PTP and TCC? Panel North Carolina State University, MGSA	2021
Applying to Graduate Schools in Mathematics Fayetteville State University	2021
Applying to Graduate Schools in Mathematics Belmont Abbey College	2021
What is a Prelim? Panel North Carolina State University, Undergrads Union Grads	2021
New Graduate Student Orientation Panel North Carolina State University, Department of Mathematics	2021
Mathematical Cryptography in a Post-Quantum World North Carolina School of Science and Mathematics	2021
Applying to Graduate School North Carolina State University, Undergrads Union Grads	2020

Pre-Calculus Curriculum Teacher Training Charlotte Mecklenburg Schools, District Training	2018
It's Cool to Care: Developing Meaningful Relationships with Students Providence High School, Teacher Training	2017
Teaching for Excellence with PEAK Strategies Providence High School, Teacher Training	2016
Promethean Board: More than Just a Glorified Projector Providence High School, Teacher Technology Training	2015
What They Don't Tell You: Expect the Unexpected North Carolina State University, Teaching Fellows Program	2014
Effective Implementation of The Secondary Common Core State Standards National Core Advocacy Group	2014

GUEST LECTURES

North Carolina State University	
Calculus II	2020
Finite Mathematics	2019
Calculus for Life & Management Sciences B	2018
Elements of Calculus	2009
Providence High School	
Honors Pre-Calculus	2017, 2018
Zebulon B. Vance High School	
Geometry	2013
AP Statistics	2012

OTHER RELEVANT EXPERIENCE

Undergraduate Outreach TA North Carolina State University	2021-2022
Graduate Curriculum Writer North Carolina State University	2020-2021
District Curriculum Writer Charlotte Mecklenburg Schools	2018
Test Administrator ACT, SAT	2013-2018
Cheerleading Coach Holy Trinity Catholic Middle School & Providence High School	2013-2018
Uncommon Planning Board Member Charlotte Mecklenburg Schools	2012-2013
Mathematics Placement Test Writer North Carolina State University	2012
Common Core Planning Team Member Granville County Schools	2012
Tutor Various Subjects, Grades 6-16	2008-present

CERTIFICATIONS

Standard Professional 2 NC Teaching License, 9-12 Math

2012-present

GRADUATE COURSEWORK

- Teaching in the Math Department
- Teaching & Learning of Algebraic Thinking
- Curriculum Development & Evaluation
- Foundations in Math Education
- Teaching & Learning of Statistical Thinking
- Linear Algebra
- Lie Algebra
- Leibniz Algebras
- Abstract Algebra I & II
- Complex Analysis
- Numerical Analysis I
- Matrix Theory I & II
- Combinatorics I & II
- Coxeter Groups
- Cryptography

PROFESSIONAL AFFILIATIONS

- American Mathematical Society
- National Council of Teachers of Mathematics
- Association for Women in Mathematics
- North Carolina Council of Teachers of Mathematics

SKILLS

Computer Languages and Programs
Educational Tools

Python, MATLAB, \LaTeX
Moodle, Canvas, EdPuzzle, Screencastomatic, Piazza,
Nearpod, Zoom, Google Classroom, Flipgrid,
Gradescope, PlayPosit, GeoGebra, Desmos

Other

Microsoft Office Suite, Google Package, Apple Package

Foreign Language

Proficient in Spanish