

# Noah A. Hughes

Assistant Professor of Mathematics  
Winston-Salem State University

## Contact

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## Education

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### University of Connecticut

Storrs, Connecticut

Ph.D. Mathematics, GPA: 3.84

May 2021

Louis J. DeLuca Outstanding Teaching Assistant Award, Graduate Certificate in Logic

### National University of Singapore

Singapore

IMS Graduate Summer School in Logic

2019

### Appalachian State University

Boone, North Carolina

M.A. Mathematics, Concentration: College Teaching, GPA: 4.00

May 2015

B.S. Mathematics, GPA: 4.00

May 2014

*Summa cum laude*, Most Distinguished Graduate in Mathematics

### Carnegie Mellon University

Pittsburgh, Pennsylvania

Summer School in Logic and Formal Epistemology

2014

## Bibliography

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*Applications of Computability Theory to Infinitary Combinatorics*

Ph.D. Thesis, University of Connecticut, May 2021.

*Reverse mathematics and marriage problems with finitely many solutions*, with Jeffrey L. Hirst.

Archive for Mathematical Logic **55** (2016) 1015-1024.

Available online (DOI) [10.1007/s00153-016-0509-4](https://doi.org/10.1007/s00153-016-0509-4).

*Reverse mathematics and marriage problems with unique solutions*, with Jeffrey L. Hirst.

Archive for Mathematical Logic **54** (2015) 49-57.

Available online (DOI) [10.1007/s00153-014-0401-z](https://doi.org/10.1007/s00153-014-0401-z).

*On the minuscule representation of type  $B_n$* , with William J. Cook.

Involve **11** (2018), No. 5, 721-733.

Available online (DOI) [10.2140/involve.2018.11.721](https://doi.org/10.2140/involve.2018.11.721)

*Reverse Mathematics: Calibrating Logical Strength in Mathematics*

Honors Undergraduate Thesis, Appalachian State University, 2014.

## Grants — Pending

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*Targeted Infusion Project (TIP):*

*Infusing Data-Focused Teaching Methods and Data-Analytic Skills into Statistics Courses at Winston-Salem State University*

NSF (Adeyeye, PI; Simpson, Co-PI; Hughes; Senior Personnel)

07/01/2023 – 07/30/2026

Amount: \$400,000

## Invited Presentations and Participation

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Department of Mathematical Sciences Colloquium Appalachian State University	December 2022
wrmp2022: Workshop on Reverse Mathematics and its Philosophy University of Chicago Center in Paris	June 2023
Department of Mathematical Sciences Colloquium Appalachian State University	October 2020
Reverse Mathematics of Combinatorial Principles CMO/BIRS Workshop 19w5111 Casa Matemática Oaxaca	September 2019
AMS Spring Eastern Sectional Meeting, Special Session on Computability Theory University of Connecticut	April 2019
New England Recursion and Definability Seminar Springfield College	November 2018
SIGMA Seminar University of Connecticut	March 2018
STEM Seminar Appalachian State University	January 2015
Ghent University Ghent, Belgium	March 2014

## Contributed Presentations

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AMS Spring Southeastern Sectional Meeting Georgia Institute of Technology	March 2023
IMS Graduate Summer School in Logic National University of Singapore	July 2019
ASL Annual North American Meeting University of Connecticut	May 2016
ASU Mathematical Sciences Colloquium Series Appalachian State University	March 2015
MAA South Eastern Section Spring Meeting University of North Carolina Wilmington	March 2015
Joint Mathematics Meetings San Antonio, TX	January 2015
UNCG Regional Mathematics and Statistics Conference University of North Carolina Greensboro Outstanding Graduate Student Presentation	November 2014
National Conference on Undergraduate Research University of Kentucky	April 2014
ASU Department of Mathematical Sciences Colloquium Series Appalachian State University	March 2014

North Carolina Honors Association Conference Appalachian State University	October 2013
ASU Department of Mathematical Sciences Colloquium Series Appalachian State University	April 2013
MAA South Eastern Section Spring Meeting Winthrop University	March 2013
UNCG Regional Mathematics and Statistics Conference University of North Carolina Greensboro	November 2012
North Carolina Council of Teachers of Mathematics Annual Conference Greensboro, NC	October 2012

## Organized Sessions and Workshops

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Joint Mathematics Meetings	January 2023
MAA Project NExT Workshop — <i>Are Grades Failing Us? Redesigning Assessment for Student Success</i> Boston, MA	

## Teaching Experience

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(\* Indicates role was teaching assistant instead of instructor of record.)

MAT 2326: <i>Elementary Statistics</i>	Summer 2023
MAT 4342: <i>Algebraic Structures II</i>	Spring 2023
MAT 2326: <i>Elementary Statistics</i>	Spring 2023
MAT 2316: <i>Linear Algebra</i>	Spring 2023
MAT 3341: <i>Algebraic Structures I</i>	Fall 2023
MAT 2326: <i>Elementary Statistics</i>	Fall 2023
MAT 2326: <i>Elementary Statistics</i>	Summer 2022
MAT 2316: <i>Linear Algebra</i>	Spring 2022
MAT 2326: <i>Elementary Statistics</i>	Fall 2021
Math 1131Q: <i>Calculus I*</i>	Fall 2020
Math 2210Q: <i>Applied Linear Algebra*</i>	Summer 2020
Math 2210Q: <i>Applied Linear Algebra</i>	Fall 2019
Math 2210Q: <i>Applied Linear Algebra</i>	Spring 2019
Math 2110Q: <i>Multivariable Calculus*</i>	Fall 2018
<i>Calculus I</i> — instructor for UConn BRIDGE	Summer 2018
Math 2410Q: <i>Elementary Differential Equations</i>	Spring 2018
Math 2110Q: <i>Multivariable Calculus</i>	Fall 2017
Math 2410Q: <i>Elementary Differential Equations</i>	Spring 2017
Directed Reading Program: <i>Computability Theory</i> by Rebecca Weber — mentor	

Math 1132Q: <i>Calculus II*</i>	Fall 2016
Directed Reading Program: <i>Naive Set Theory</i> by Paul Halmos – mentor	
Math 1132Q: <i>Calculus II*</i>	Spring 2016
Math 1020: <i>Problem Solving</i>	Fall 2015
MAT 1020: <i>College Algebra with Applications</i>	Spring 2015
MAT 1020: <i>College Algebra with Applications</i>	Fall 2014

## Employment History

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Winston-Salem State University – Winston-Salem, NC	Fall 2021 – Present
<i>Assistant Professor of Mathematics</i>	
Stemify – Farmington, CT	Summer 2020
<i>Independent Contractor (Mathematical Education Consultant)</i>	
Create multiple choice problem and solution banks for a variety of mathematical topics.	
COMAP, Inc. – Bedford, MA	Fall 2019 – Present
<i>Triage judge</i>	
Judge submissions to the Mathematical Contest in Modeling and the High School Mathematical Contest in Modeling.	
University of Connecticut – Storrs, CT	Fall 2015 – Present
<i>Teaching Assistant</i>	
Instruct undergraduate mathematics courses.	
Appalachian State University – Boone, NC	Fall 2014 – Spring 2015
<i>Teaching Assistant</i>	
Instruct introductory general education mathematics courses.	
Appalachian State University – Boone, NC	Summer 2013 – Spring 2014
<i>Instructional Assistant</i>	
Lead study halls, provide supplemental instruction and materials, and write answer keys. Courses assisted include Calculus I, II and Techniques of Proof.	
Appalachian State University University Tutoring Services – Boone, NC	2012 – 2014
<i>University Tutoring Services Lab General Math Tutor</i>	
<i>General Math Help Lab Tutor</i>	
Appalachian State University – Boone, NC	2012
<i>Coach – High Country Robotic Camp for Grades 6 - 12</i>	
<i>Coach – ASU Math Camp</i>	

## Professional Organizations

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Member – Association of Symbolic Logic	August 2017 – Present
Member – American Mathematical Society	November 2014 – Present
Member – Mathematical Association of America	August 2022 – Present
Member – Pi Mu Epsilon	April 2014 – Present
Member – Phi Kappa Phi	March 2013 – Present

## Awards and Scholarships

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Doctoral Dissertation Fellowship	2020
Louis J. De Luca Outstanding Teaching Assistant Award	2019
Chancellor's Fellowship	Fall 2014 – Spring 2015
Outstanding Graduate Presentation Award	2014
North Carolina Teaching Fellows Scholarship	Fall 2011 – Spring 2013
Mary Cain Academic Scholarship	Fall 2012 – Spring 2013
GEAR UP Tuition Assistance Scholarship	Fall 2011 – Spring 2015
Dean's List, Appalachian State University	Fall & Spring 2011 – 2013
Chancellor's List, Appalachian State University	Fall & Spring 2011 – 2013
Dean's List, Caldwell Community College	Summer 2012