

FOREST FISHER

last updated **August 28, 2015**

50 W 40th St, Room 609 • New York, NY 10018
646-313-8073 • forest.fisher@guttman.cuny.edu
<http://fdfisher.com>

EDUCATION

Ph.D. in Mathematics, The George Washington University 2010
Thesis Advisor: William Schmitt
Thesis Title: CoZinbiel Hopf Algebras in Combinatorics

B.A. in Mathematics and Economics, Oberlin College 2004

EMPLOYMENT

2013-present, Guttman Community College, New York, NY
Assistant Professor of Mathematics

Fall 2013, New York University, New York, NY
Adjunct Professor of Computer Science

2010-2013, Northern Virginia Community College, Manassas, VA
Assistant Professor of Mathematics

2004-2010, The George Washington University, Washington, DC
Graduate Teaching Assistant and Instructor

TEACHING EXPERIENCE

2013-present **Assistant Professor (Guttman):** Taught every mathematics course offered and team-taught several interdisciplinary courses: designed course syllabi, prepared and delivered class activities 2-4 times a week for each course, wrote and graded exams, homework, group projects, and service learning activities. Guttman is a brand new school with a new vision for the first year experience. Part of the teaching experience has been developing unconventional pedagogical tools for teaching math to non-traditional college students. Courses include the following:

Summer Bridge (Quantitative Reasoning)
LASC 101: City Seminar I (Quantitative Reasoning)
LASC 102: City Seminar II (Quantitative Reasoning)
MATH 103A: Statistics A
MATH 103B: Statistics B
MATH 120: College Algebra
MATH 201: Precalculus (Hybrid)
MATH 210: Calculus

Fall 2013 **Adjunct Professor (NYU):** Taught an introductory computer programming course on Python: designed course syllabus, prepared and delivered lectures to 57 students twice a week, hired and coordinated with two graders, held office hours, and wrote and graded exams.

CSCI-UA.0002: Introduction to Computer Programming

2010-2013 **Assistant Professor (NVCC):** Taught 15+ credit hours each semester as a full-time faculty member: designed course syllabi, prepared and delivered lectures twice a week for each course, wrote and graded exams and homework assignments, and held 10 office hours each week. Courses included the following:

MTH 152: Math for the Liberal Arts II
MTH 166: Precalculus with Trigonometry (honors and regular)
MTH 173: Calculus with Analytic Geometry I
MTH 174: Calculus with Analytic Geometry II
MTH 217: Statistics I
MTH 271: Applied Calculus I
MTH 277: Vector Calculus

2008-2010 **Instructor (GWU):** Taught classes during the six-week Summer session and the regular school year: designed course syllabi, prepared and delivered lectures, wrote and graded exams and homework assignments, and held weekly office hours. Courses included the following:

Math 51: Finite Mathematics for the Social and Management Sciences
- Summer Session II, 2008 & 2009
Math 52: Calculus for the Social and Management Sciences
- Spring 2010

2004-2010 **Graduate Teaching Assistant (GWU):** Taught weekly discussion and problem solving sessions, held 3 office hours each week, proctored exams, and graded homework. Courses included the following:

Math 20: Calculus with Precalculus
Math 32: Single-Variable Calculus II
Math 33: Multivariable Calculus
Math 51: Finite Mathematics for the Social and Management Sciences and
Math 52: Calculus for the Social and Management Sciences

SERVICE

- Fall 2015-present **Committee on Academic Appeals and Policies** - Reviewed academic appeals for students on academic probation and students seeking readmittance to the college or grade changes.
- Fall 2015-present **Student Tech Fee Committee** - Reviews proposals for technology-related projects on campus.
- Summer 2015 **New Faculty Onboarding** - Helped Nate Mickelson facilitate a discussion about the first year experience and an assignment sequence that we co-designed.
- Summer 2015 **Hybrid Learning Circles** - Helped Kristina Baines facilitate a discussion with faculty as they planned their hybrid classes for the Fall semester at Guttman.
- Spring 2015-present **MSCHE Steering Committee** - Co-Chair of the Institutional Assessment Working Group and member of the steering committee that seeks accreditation from the Middle States Commission on Higher Education.

- Spring 2015 **Search Committee** for an Academic Student Support Counselor.
- Fall 2014-present **Broad Integrative Knowledge GLO Team Leader** - Managing a three year self-study of Guttman's Broad Integrative Knowledge Learning Outcome.
- Fall 2014-present **Assessment & Professional Development Committee** - Investigated ways to better integrate Guttman's many assessment and professional development initiatives.
- Fall 2014 **Search Committee** for an Assistant or Associate Math Faculty member.
- Fall 2014 **Search Committee** for a full-time math instructor.
- Fall 2014-present **ePortfolio and Academic Technology Working Group** - Participated in decisions regarding the deployment of academic technologies at Guttman including the development of a hybrid Precalculus course for Spring 2015.
- Spring 2014 **Working Group on Early-Alert System** - Helped select an early-alert system that Guttman could use in place of Early IQ.
- Spring 2014 **Search Committee** for the 2014-2015 Quantitative Reasoning Fellow.
- Fall 2013-present **First Year Experience Steering Committee** - Rewrote the Quantitative Reasoning Skills Spine for City Seminar with Jan Green.
- Fall 2013 **Mathematics Subcommittee of the Curriculum Committee** - Piloted WeBWorK as an alternative to MyStatLab in Spring I, Calculus course.
- Fall 2013 **Curriculum Design Workshop** - Developed and co-taught a workshop on cooperative learning and quantitative reasoning with Jan Green.
- Fall 2013-present **Not Just Numbers Club** - Sponsored Guttman's first ever math club by helping students draft a constitution and design activities.
- Spring 2013 **Search Committee** for a full-time split Engineering/Mathematics Faculty position.
- Fall 2012 **Evaluated StraighterLine online Precalculus course MAT201** to determine whether or not NVCC should offer credit for MTH 166: Precalculus with Trigonometry upon completion of MAT201.
- Spring 2012 **Co-chair of Search Committee** for a full-time Math Faculty position.
- Fall 2011 **Faculty Service Excellence Training Program** - Participated in pilot training program to improve faculty-community relations.
- Spring 2011 **Search Committee** for a full-time Biology Faculty position.
- Spring 2011 **Evening Administrator at Manassas Innovation Park campus** - Served as emergency contact on satellite campus and locked doors at the end of the night.
- Fall 2009 **Second Colonial Math Challenge** - Timer in math bowl for high school students.
- Fall 2008 **Colonial Math Challenge** - Proctored a math exam for advanced high school students.

INVITED AND CONTRIBUTED TALKS

- August 25, 2015 **Measures of Center: Using APOS Theory and GeoGebra to Teach Statistics** at the 3rd Annual GeoGebra Conference of Southern Connecticut, Southern Connecticut State University, New Haven, CT
- May 8, 2015 **Building Skills Through Neighborhood Research: A Place-Based Approach to Integrating Developmental and Credit-Bearing Work at Guttman Community College** with Nate Mickelson at the 11th Annual CUE Conference, City College, New York, NY
- May 1, 2015 **Beyond Content Consumption: Thinking About Students as Inquirers and Producers in Hybrid Courses** with Kristina Baines et al. at Online Education: Successes, Challenges, and Best Practices, John Jay College of Criminal Justice, New York, NY
- April 26, 2014 **Food Economy Theater: A Multimodal and Interdisciplinary Assignment Sequence for First Year Community College Students** with Nate Mickelson at Traditions and Transactions II, BMCC, New York, NY
- September 10, 2011 **A Rigidity Theorem for connected, cocommutative Hopf monoids**, AMS Fall Eastern Sectional Meeting, Cornell University, Ithaca, NY
- February 18, 2011 **The type A Coxeter complex in algebraic combinatorics**, GMU Combinatorics, Algebra & Geometry Seminar, George Mason Univ., Fairfax, VA
- November 11, 2010 **An Algebraic Approach to the Graph Reconstruction Conjecture** GWU Combinatorics Seminar, The George Washington University, Washington, DC,
- October 8, 2010 **Combinatorial Hopf Algebras by way of Groups**, GMU Combinatorics, Algebra & Geometry Seminar, George Mason University, Fairfax, VA
- October 7, 2010 **Combinatorial Hopf Algebras by way of Groups**, GWU Combinatorics Seminar, The George Washington University, Washington, DC
- June 15, 2010 **CoZinbiel Hopf algebras in combinatorics**, SIAM Discrete Mathematics Conference, Austin, TX
- April 3, 2010 **Hopf algebras on combinatorial objects with restriction**, Graduate Student Combinatorics Conference, Auburn University, Auburn, AL
- January 15, 2010 **A decomposition of the Dynkin idempotent in the Hopf algebra of graphs**, MAA-AMS Joint Mathematics Meeting, San Francisco, CA
- October 23, 2009 **Monoidal categories**, GWU Mathematics Graduate Student Seminar, The George Washington University, Washington, DC
- May 12, 2009 **Cocommutative Hopf algebras and dendriform algebras**, University of Maryland Graduate Student Algebra-Number Theory Seminar, College Park, MD
- April 25, 2009 **The cozinbiel bialgebra of graphs**, DC Math Grad Student Meeting, The George Washington University, Washington, DC
- October 24, 2008 **Hopf algebras and combinatorics**, GWU Mathematics Graduate Student Seminar, The George Washington University, Washington, DC

PROFESSIONAL DEVELOPMENT & CONFERENCES ATTENDED

- August 25, 2015 **The 3rd Annual GeoGebra Conference of Southern Connecticut**, Southern Connecticut State University, New Haven, CT
- May 8, 2015 **The 11th Annual CUE Conference**, City College, New York, NY
- May 1, 2015 **Online Education: Successes, Challenges, and Best Practices**, John Jay College of Criminal Justice, New York, NY
- January 20-21, 2015 **Engaged Scholarship: Fulfilling the Promise of the Public University**, NYMAPS Symposium, City College, New York, NY
- December 4-5, 2014 **CUNY IT Conference**, John Jay College, New York, NY
- June 12-13, 2014 **Numeracy Infusion Course for Higher Education (NICHE)**, Lehman College, New York, NY
- May 9, 2014 **CUNY 2014 Mathematics Conference: Effective Instructional Strategies**, The Graduate Center at CUNY, New York, NY
- April 25-27, 2014 **Transitions and Transactions II**, Borough of Manhattan Community College, New York, NY
- March 13, 2014 **Common Hour Conversation on Learning Disabilities**, Sheila Steinhof, Guttman Community College, New York NY
- February 14, 2014 **Learning Styles and Autism: Strategies for a Successful College Experience**, Samantha Feinman, the CUNY Graduate Center
- January 22, 2014 **First Year Experience Steering Committee's Curriculum Development Workshop**, Guttman Community College, New York, NY
- October 17, 2013 **Building Students' Ability to Reason and Write Analytically about Quantitative Data**, Jan Green, Guttman Community College, New York, NY
- January 9-10, 2013 **Power Up Your Pedagogy Conference**, Northern Virginia Community College, Annandale, VA
- October 20-21, 2012 **AMS Fall Central Sectional Meeting**, University of Akron, Akron, OH
- January 4-5, 2012 **Power Up Your Pedagogy Conference**, Northern Virginia Community College, Annandale, VA
- September 10-11, 2011 **AMS Fall Eastern Sectional Meeting**, Cornell University, Ithaca, NY
- January 6-9, 2011 **MAA-AMS Joint Mathematics Meetings**, New Orleans, LA
- June 14-17, 2010 **SIAM Discrete Mathematics Conference**, Austin, TX
- April 3-4, 2010 **Graduate Student Combinatorics Conference**, Auburn Univ., Auburn, AL
- January 13-16, 2010 **MAA-AMS Joint Mathematics Meetings**, San Francisco, CA
- April 25-26, 2009 **DC Math Graduate Student Conference**, The George Washington University, Washington, DC
- March 27-29, 2009 **Graduate Student Combinatorics Conference**, University of Kentucky, Lexington, KY
- January 5-8, 2009 **MAA-AMS Joint Mathematics Meetings**, Washington, DC

PUBLICATIONS

How neuroscience informs the object-process duality in mathematics, in preparation.

A Rigidity theorem for connected, cocommutative Hopf monoids, in preparation.

PROFESSIONAL ACTIVITIES

Spring 2013 **Referee** for NSA-AMS Math and Science Partnership grant proposal.

Fall 2012 **Co-organized the Special Session on Graphs and Polytopes in Algebraic Combinatorics** at the AMS 2012 Central Fall Sectional Meeting in Akron, OH.

Spring 2010 **Chair of the contributed paper session Algebras, I** at the MAA-AMS Joint Mathematics Meetings in San Francisco, CA.

Spring 2009 **DC Math Graduate Student Meeting** - Co-founded and organized a conference for math graduate students in the Washington, DC area.

AWARDS AND HONORS

Nominee for Faculty of the Year, Northern Virginia Community College, 2013 - nominated by alumni and current students through a written essay

James H. Taylor Graduate Mathematics Prize, The George Washington University, 2010 - awarded once a year to an "outstanding mathematics graduate student"

COMPUTER SKILLS

Digication: Experience using Digication's ePortfolio software to help students build online portfolios of their work, and engender self-reflection.

Blackboard: Experience with setting up a course, managing grades, uploading files such as homework assignments, sending out emails, etc. "Blackboard Certified" by NVCC

MyMathLab, WeBWorK, WileyPlus, & Webassign: Experience with setting up a course, creating and scheduling assignments, etc.

GeoGebra: Experience with basic graphing, spreadsheet, and programming features. Have used GeoGebra to design interactive worksheets for use in the classroom.

NetLogo: Incorporated an agent-based model of climate change into a project assigned to my Calculus students.

Mathematica: Experience with standard programming toolkit & the Combinatorica package.

Sage: Experience plotting 3d graphs, and calculating integrals & derivatives.

Python Programming Language: Experienced with the standard programming toolkit, Tkinter, and the Django web development framework. Taught Python course at NYU.

Wordpress: Experience developing themes from scratch, and publishing content.

Javascript: Experience writing small web apps using HTML5 Canvas and Javascript.

HTML/CSS: Experience writing web pages with modern web standards (no tables or frames,) and a basic knowledge of media types and CSS3 transforms.

GDevelop: Using this development environment to create simple games for learning math.

Also familiar with **Scribus**, **C**, **C++**, **shell scripting**, **Arc statistics package**, **R statistics package**, **Fathom**, **Minitab**, **EViews**, **Desmos**, **Unix/Linux**