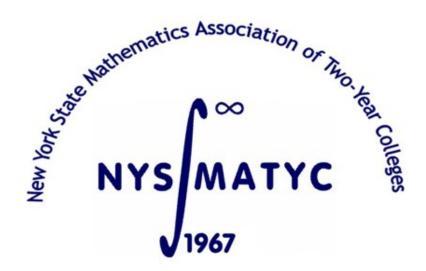
## 54th Annual NYSMATYC Conference





April 8-9, 2022 Virtual



# NYS MATYC New York State Mathematics Association of Two-Year Colleges

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#### **Acknowledgements**

The Executive Board of NYSMATYC wishes to thank all presenters, presiders, and attendees for supporting this conference and for being involved in this wonderful organization.

A very special thank you to our vendor sponsors:

• Main Conference sponsor



Additional Sponsors







## 54<sup>th</sup> Annual NYSMATYC Conference – Program Summary

| Time                 | Room 1  | Room 2   | Room 3  |  |  |
|----------------------|---|--|---|--|--|
| Friday April 8, 2022 |   |  |   |  |  |
| 1:00-1:45            | Room 1: Executive Board Meeting (current board)   |  |   |  |  |
| 2:00-3:00            | Using CalcPlot3D to 3D Print Surfaces and Curves in Calculus & Beyond  Paul Seeburger Monroe Community College  | Math Co-requisite Offerings at Westchester Community College  Alannah Bennie, Chi Giang, and Dr. Shaun Rajan Westchester Community College | Sponsor Session  What differentiates Lumen Learning's Calculus courses from others?  Chris Podehl Lumen Learning  |  |  |
| 3:15-3:45            | Creating Custom Math OER Textbooks on the LibreTexts Platform Paul Seeburger Monroe Community College   | The Wonders of OneNote  Heather O'Brien  Jefferson Community College   | Creating a Pipeline from Gateway Courses to STEM Programs for Talented Women at a Community College Carolyn King and Clara Wajngurt Queensborough Community College |  |  |
| 4:00-5:00            | Proving Mathematical Conjectures Using Boolean Satisfiability Solvers  Alexander Atwood Suffolk County Community College  | How to Write Your Own<br>Questions in MyOpenMath<br>JoAnne Thacker<br>Nassau Community College   | Vendor Session Your Math Courses, Your Way  Elona Love DigitalEd  |  |  |
| 5:15-6:00            | Chat and Chew Happy Hour Session #1  Join the conversations any time you can!   |  |   |  |  |
|                      | Alternative Instructional Modalities (Remote, Hybrid, Online, etc.)  Beth Congdon   | Math Placement  Colleen Stevens  Jay Hurlburt  | Vendor Session Creating Your Corequisite Math Course in MyLab Dr. Calandra Davis and  |  |  |
| 6:15-6:50            | Liz McGrath (Facilitators) Allison Tierney Pearson  Room 1: Scholarship and New Website Presentations   |  |   |  |  |
| 6:50-7:50            | Room 1: Friday Keynote Address: Stop Surviving and Start Thriving  Dr. Elizabeth Keida and Dr. Amy Bidwell SUNY Oswego, Department of Health Promotion and Wellness |  |   |  |  |

## 54<sup>th</sup> Annual NYSMATYC Conference – Program Summary

| Time                   | Room 1  | Room 2   | Room 3  |  |
|------------------------|---|--|---|--|
| Saturday April 9, 2022 |   |  |   |  |
| 8:30-9:00              | Sicherman Dice<br>(weird dice)<br>Steven Gottlieb<br>Retired  | Modeling a Rocket's Path  Dr. Satyanand Singh New York City College of Technology  | Vendor Session Elements for Successful Courses in the Digital Age Kate Wise Hawkes Learning   |  |
| 9:15-10:15             | Teaching Post-COVID Students in College-Level Courses  Janna Liberant Rockland Community College  | Improving Students' Statistical Literacy through Writing Their Interpretations of their Conceptual Understanding Wladina A Alexakos Fairleigh Dickinson University | Sponsor Session  Online Homework Manager (OHM) Workshop: What's New and Cool?  Natalie Chakrian Lumen Learning  |  |
| 10:30-11:30            | Fun with Infinity  Steven Gottlieb  Retired   | Strategies and Tools for<br>Engaging Preservice<br>Elementary Teachers  Heather O'Brien Jefferson Community College  | OER for a Simulation-<br>based Statistics Course  Session Cancelled Sara Laylor  Dutchess Community College   |  |
| 11:30-12:00            | Lunch Break – Open Zoom Room 1 to Chat  |  |   |  |
| 12:00-12:45            | Room 1: Business Meeting for All Members  |  |   |  |
| 1:00-2:00              | Room 1: Saturday Keynote Address: Math + Belonging = Student Success and Well Being  Daysha Jackson-Sanchez and Lisa Levinson (Sponsored by Lumen Learning) |  |   |  |
| 2:15-3:00              | The Best Domains for<br>Some Integrals in Calc II<br>Luis F. Moreno<br>Broome Community College   | Teaching Mathematics: Making an Emphasis on Definitions and StSession Cancelled as Maria Alzugaray Suffolk County Community College                                | What I Learned by Taking American Sign Language (ASL) Classes and Why You Should Encourage STEM Students to Also Study ASL Patty Owens Onondaga Community College |  |
|                        | Chat and Chew Happy Hour Session #2  Join the conversations any time you can!   |  |   |  |
| 3:15-4:00              | Corequisite Courses and<br>Math Pathways  Brian Milleville (Facilitator)  | Concurrent Enrollment  Colleen Stevens (Facilitator)   | Whine with Wine (or your other favorite beverage)  Jay Hurlburt and Joe Bernat (Facilitators)   |  |
| 4:15-5:00              | Room 1: Executive Board Meeting (including any newly elected or appointed officers)   |  |   |  |

## NYSMATYC Annual Conference Program Friday April 8, 2022

1:00 – 1:45 pm Room 1: Executive Board Meeting (current board members)

2:00 - 3:00 pm

Room 1
Presenter: Paul Seeburger

Using CalcPlot3D to 3D Print Surfaces and Curves in Calculus & Beyond



This session explores the free visualization app CalcPlot3D, focusing on how to use it to generate STL files to 3D-print surfaces and curves from single and multivariable calculus and beyond. Learn to print implicit surfaces, volumes of revolution, surfaces with contour plots on them, knots, and more.

Room 2 Presenters:

Alannah Bennie Chi Giang





Math Co-requisite Offerings at Westchester Community College

The future in motivating students to completion are co-requisite courses. The Mathematics Department at WCC will describe how they established a co-requisite course, identified students for the course, challenges and successes they have faced to date, and future plans to improve the co-requisite program for students and faculty.

[Session Resources]

Dr. Shaun Rajan







## What differentiates Lumen Learning's Calculus courses from others?

Lumen's new Calculus courses include integrated prerequisite material, application assignments, an interactive textbook, and a capstone project. Lumen's partnership with Desmos enables OHM to seamlessly integrate interactives and three types of calculators (basic/scientific/graphing). Join this session to learn how to easily customize courses to meet your students' needs.

#### 3:15 - 3:45 pm

Room 1
Presenter: Paul Seeburger



## **Creating Custom Math OER Textbooks on the LibreTexts Platform**

Learn to customize OER textbooks for math courses on the LibreTexts platform! LibreTexts includes a WYSIWYG content editor to easily edit textbook content, formatting math using LaTeX. You can add your own examples, exercises, figures, etc.! Consistent numbering makes the textbook look professional and consistent, customized for your course.

Room 2
Presenter: Heather O'Brien



#### The Wonders of OneNote

Microsoft OneNote is the most versatile tool. Heather will give an overview of the wonderful features of OneNote and why she has been using it for 15 years. This is a great tool for teaching, advising, committee work and organizing large projects.

[Session Resources]

Room 3 Presenters:

Carolyn King



Clara Wajngurt

## **Creating a Pipeline from Gateway Courses to STEM Programs** for Talented Women at a Community College

Community colleges, as institutions that disproportionally serve populations underrepresented in STEM disciplines, are uniquely positioned to address the shortage of female STEM graduates (Hanover Research, 2014). The largest implication from our Women and STEM study is the opportunity to increase the number of talented women pursuing STEM careers. Audience: staff/faculty who are working to increase diversity in STEM.

4:00 - 5:00 pm

Room 1 Proving Mathematica Presenter: Alexander Atwood Satisfiability Solvers

## **Proving Mathematical Conjectures Using Boolean Satisfiability Solvers**



An overview of the surprising and quite stunning application of Boolean Satisfiability (SAT) Solvers to prove difficult mathematical conjectures will be given, with examples of how conjectures such as the Collatz conjecture can be transformed by a rewriting process into formulas that use propositional logic and can thereby be tested by a computer to see whether these rewriting systems eventually terminate.

Room 2
Presenter: JoAnne Thacker



#### How to Write Your Own Questions in MyOpenMath

MyOpenMath (MOM) is a robust OER homework and assessment tool that can be used in any math class, plus several science disciplines. In addition to an online open library of hundreds of ready to use questions, MOM also offers the option of programming instructor-developed questions, tailored to the way a course may be taught. This presentation will instruct on how to write questions and navigate the MOM function libraries. Some programming knowledge and understanding is required.

Room 3 Vendor Session
Presenter: Elona Love



#### Your Math Courses, Your Way

Education is evolving, but the shift to being increasingly online doesn't mean Instructors should compromise how they teach. Möbius by DigitalEd can help navigate the online world with a solid digital academic toolset, designed to enable instructors to deliver your math courses your way. No compromise!

5:15 – 6:00 pm Chat and Chew Happy Hour #1 and Vendor Session

Room 1

Facilitators: Beth Congdon

Liz McGrath

Alternative Instructional Modalities (Synchronous Online, Hybrid, Asynchronous Online, etc.)

Room 2 Math Placement

Facilitators: Colleen Stevens

Jay Hurlburt

## Room 3 Vendor Session Presenters:



Allison Tierney



#### **Creating Your Corequisite Math Course in MyLab**

This session will provide detailed guidance for participants wanting to explore how to build or customize a corequisite math course in MyLab Math/ Statistics. The presenter will share popular assignment configurations and MyLab features often utilized when developing such courses. You will leave this session with tangible ideas that you can use to create a corequisite course tailored to your specifications - regardless of the textbook you are using. Learn about our adaptive & personalized content, integrated review assessment, and low-cost or free placement offerings through MyMathTest.

Interactive use of technology, eager to dig into NY- and coursespecific co-req questions, from beginner to advanced.

6:15 – 6:50 pm Room 1 Scholarship and New Website Presentations (all attendees)

6:50 – 7:50 pm Room 1

## Friday Keynote Address (all attendees): Stop Surviving and Start Thriving

In today's "new normal," individuals' resilience is tested daily. Consequently, personal well-being is negatively impacted. Behavior change strategies, geared towards improving overall well-being may be the answer. Research shows that daily habit-tracking, weekly SMART goal setting, journaling, positive psychology and group coaching help individuals THRIVE!

Presenter: Dr. Elizabeth Keida



Dr. Elizabeth Keida is a full-time Assistant Professor in the Department of Health Promotion and Wellness at the State University of New York at Oswego. Dr. Keida's M.S. in Science Education and M.S. in Exercise Physiology are from Syracuse University. Her doctorate is from St. John Fisher College in Executive Leadership where her research focused on health promotion to mitigate chronic disease. Dr. Keida is currently the lead investigator on a worksite wellness program in higher education which aims to combat chronic diseases. Dr. Keida has presented at various national and international conferences, coauthored a Health Promotion textbook, and is a nationally certified YMCA Diabetes Educator and a Certified Worksite Wellness Specialist and Program Manager.

Presenter: Dr. Amy Bidwell



Dr. Bidwell is a full-time Associate Professor and Department Chair in the Department of Health Promotion and Wellness at the State University of New York at Oswego. She received her M.S. and PhD from Syracuse University in Exercise Physiology and Science Education with a research emphasis in nutrition, physical inactivity, and disease progression. Dr. Bidwell is currently the lead investigator on a universitywide wellness program aimed at improving the six dimensions of wellness in college students, faculty, and staff. The research emphasizes a holistic approach to health using daily goal setting and group coaching. Dr. Bidwell has presented at various national and international conferences. She has published numerous peerreviewed manuscripts in the field of nutrition, physical activity, and behavior change. Most recently she co-authored a textbook titled: Introduction to Health Promotion and Wellness Management, 1st edition.

## NYSMATYC Annual Conference Program Saturday April 9, 2022

8:30 - 9:00 am

Room 1
Presenter: Steven Gottlieb



#### Sicherman Dice (weird dice)

Are there other ways to label two dice with positive integers so that the probability of getting a particular sum is the same as with a regular pair of dice. How many different labelings will work?

Room 2
Presenter: Dr. Satyanand Singh



#### Modeling a Rocket's Path

Come experience a modeling approach to a problem that was inspired by NASA. Students were required to model a rocket's path by using differential equations using open-source software in a remote setting. This presentation is accessible to someone teaching calculus and/or differential equations.

[Session Resources]

Room 3 Vendor Session Presenter: Kate Wise



#### **Elements for Successful Courses in the Digital Age**

Hawkes Learning: Join as we explore how equity, scalability and engagement play a role in supporting students and learn new ways to connect with them by facilitating active participation, prioritizing accessibility, and more. Attend and be entered to win one of three \$25 Amazon Gift Cards!

9:15 - 10:15 am

Room 1

Presenter: Janna Liberant



#### **Teaching Post-COVID Students in College-Level Courses**

The presentation will focus on helpful hints taken from expert opinions, personal experience and practice teaching live classes on campus after pandemic hiatus. The suggestion will be given specifically oriented towards college-level mathematics courses for students with diverse backgrounds and preparation. The discussion will follow with attendees sharing their own experiences and helpful suggestions for dealing with issues arising during the transition to classroom period.

Room 2
Presenter: Dr. Wladina Alexakos



## Improving Students' Statistical Literacy through Writing Their Interpretations of their Conceptual Understanding

The presentation is about improving students' statistical literacy through writing their interpretations and conceptual understanding. When writing is included as part of the assessment in a statistic course, students become more aware that rote learning and memorizing formulas is not what it means to do statistical reasoning.

Room 3 Sponsor Session
Presenter: Natalie Chakrian



## Online Homework Manager (OHM) Workshop: What's New and Cool?

Designed by educators, Lumen's Online Homework Manager (OHM) draws from thousands of interactive assessment questions to help students master math and other quantitative skills. Faculty can customize existing "course templates" designed by other faculty from around the country that include textbooks based on Open Education Resources (OERs) and aligned auto-graded problem sets or build from scratch.

This hands-on workshop will provide an overview of some of the advanced features within OHM. A range of time saving tips, best practices and more advanced features will also be highlighted. Plenty of open time for exploration will be provided with OHM experts on-hand to provide one-on-one assistance.

Anyone new to OHM will be able to get an account setup and be assisted in getting a general orientation to the platform.

10:30 - 11:30 am

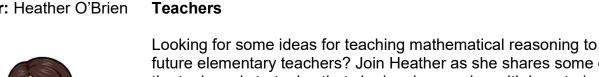
Room 1
Presenter: Steven Gottlieb



#### **Fun with Infinity**

This talk will exam some strange facts about infinity. Everyone is invited but expect to be dizzy by the end of this talk!

Room 2
Presenter: Heather O'Brien



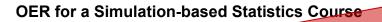


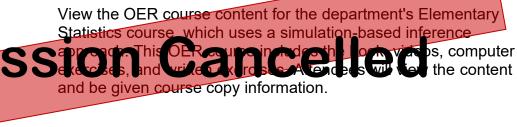
future elementary teachers? Join Heather as she shares some of the tools and strategies that she has been using with her students. She will share how she uses group quizzes, math-cast, peer reviews, and the tech tools that help connect her students to the content and each other.

**Strategies and Tools for Engaging Preservice Elementary** 

Session Resources

Room 3
Presenter: Sara Taylor





11:30 am – 12:00 pm Room 1 **Lunch Break (Zoom Room 1 open for Chat and Discussion)** 

12:00 – 12:45 pm Room 1 **Business Meeting for all NYSMATYC Members** 

1:00 – 2:00 pm Room 1 Saturday Keynote Address (all attendees):
Math + Belonging = Student Success and Well Being

Based on Lumen Learning's professional development offering Belonging and Inclusive Teaching Fundamentals, this keynote will engage the audience on the topic of college students' sense of belonging. Together, we will explore the impact of belonging on college student success and well-being. The audience will gain a deeper understanding of how best to foster belonging for all students but more specifically students in a math learning environment.

Presenter: Daysha Jackson-Sanchez



Daysha has over 15 years of experience in higher education administration serving in roles such as Dean of Student Success at Manchester University and Assistant Vice Chancellor of Student Affairs at Ivy Tech Community College. She is currently the Program Manager for Equity and Grant Initiatives at Lumen Learning and a faculty member at the University of St. Francis in the College of Adult and Distance Education.

Daysha is a Ph.D. candidate at Indiana State University and is studying the experiences of faculty who participate in diversity, equity, and inclusion professional development. As a first-generation college graduate, Daysha has a passion for eliminating barriers that improve student success, especially those faced by underresourced and racially minoritized students. She resides in Roanoke, Indiana, with her husband and two sons.

Presenter: Lisa Levinson



As a lifelong learner Lisa has altered her career paths to follow her learning adventures. She began her work career as a Biology faculty at a community college, pivoted to delve into adult learning and literacy, and was an early adapter of using online venues to create Communities of Practice and Learning Communities. Along the way she became a certified facilitator and mediator, online community manager, and a coach for online newbies. She has directed local, state, and national projects and a national professional development dissemination center. She always looks forward to her next learning experience.

Lisa has always believed in the power of stories, learning together, and empowering marginalized people and communities. Active in community groups and charities, she has sat on not-for-profit boards, volunteered in various capacities, and trained fellow volunteers on the work to be done.

She lives in Florida with her husband of many years and an elderly rescued pit bull mix dog. She enjoys beach walks and swims, hiking, traveling, gardening, and cooking and eating. Family is important to her as is being a good human being.

2:15 - 3:00 pm

Room 1

Presenter: Luis Moreno



The Best Domains for Some Integrals in Calc II

Antiderivatives involving  $a^2 \pm u^2$  or  $u^2 - a^2$  should be expressed with their most comprehensive domains. We will concentrate on the interesting integral that yields the inverse hyperbolic cosine. This will segue into some interesting functions. [Session Resource]

Room 2 Presenter: Dr. Maria Alzugaray Teaching Mathematics: Making an Emphasis on Definitions and Streamlining Calculations



Definitions are crucial for understanding mathematics. The presenter with a present place of the help students become more proficient in their mathematical skills and knowledge.

Room 3 Presenter: Patty Owens What I Learned by Taking American Sign Language (ASL) Classes and Why You Should Encourage STEM Students to Also Study **ASL** 



American Sign Language (ASL) and mathematics have a lot in common. Both are visual and symbolic which leads to many in the Deaf and Hard of Hearing community to really enjoy mathematics. However, STEM is one of the areas of ASL that does not have a standardized vocabulary which leads to barriers with equity and access. Linguists and Deaf STEM professionals are working to standardize signs for these professions after years of being told the Deaf and Hard of Hearing cannot work in these areas. Come learn the challenges the community faces in these fields and how you and your STEM students can be allies to the Deaf and Hard of Hearing community.

3:15 - 4:00 pm **Chat and Chew Happy Hour #2** 

Room 1 **Corequisite Courses and Math Pathways** 

Facilitator: Brian Milleville

Room 2 **Concurrent Enrollment** 

Facilitator: Colleen Stevens

Room 3 Whine with wine (or your other favorite beverage!)

Facilitators: Jay Hurlburt

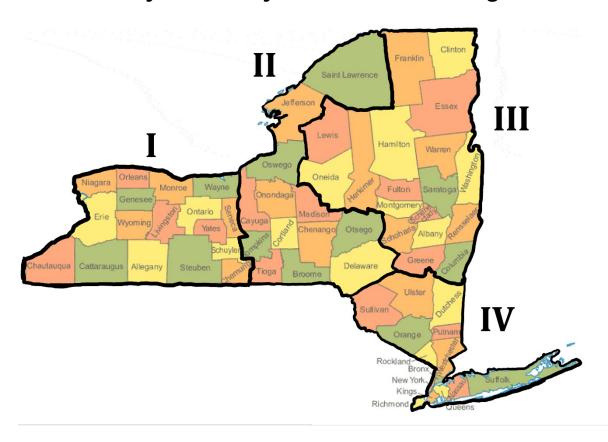
Room 1

Joe Bernat

4:15 - 5:00 pm **Executive Board Meeting (newly elected or appointed board members)** 

15

#### Do you know your NYSMATYC region?



IF you are... interested in having a regional conference, or wondering who your campus representative is for NYSMATYC, or interested in being on the Board at some point, or wondering how to get your school mentioned in the Newsletter, or wondering how to get your school to participate in the Math League contest, or wondering how students apply for NYSMATYC scholarships, or wondering how to become a campus representative,

THEN ask your region's Member-at-Large! (or any board member really)

Region I: Brian Milleville Region II: Beth Congdon Region III: Theresa Powers Region IV: Joe Bernat