

Detailed Program: Friday

12:00 – 12:50 **Lunch**
West Starfire

1:00 – 1:25

Session 1 **Classroom response system in introductory statistics courses**

N. Williamsburg

Presenter: Myung-Chul Kim – Suffolk County Community College

Presider: Janis Mazza – Nassau Community College

The use of classroom response system can help student learning, engagement and perception during the class. Also, it can enlighten the instructor to sources of student difficulties. In this talk, the effective use of clickers, when teaching statistics, will be presented.

Session 2 **.999... = 1 as a Developmental Mathematics Learning Activity**

S. Williamsburg

Presenter: Chris L. Yuen – University at Buffalo

Presider: Abby Gehris – SUNY Broome Community College

Past research documented how the misconception of in-service teachers toward $.999... \neq 1$ can have adverse effects in instruction. This presentation shows multiple ways of engaging students to prove $.999... = 1$. From direct proofs using fraction/decimal to indirect proofs of putting $.999...$ on trial, contradicting the claim that $.999... < 1$.

1:00 – 2:00

Session 3 **Creating a Structured Space for Writing about Data**

East Starfire

Presenters: Jan Green – Guttman Community College

Presider: Sean Simpson – Westchester Community College

This semester, I constructed and utilized templates to help students analyze and write about data presented in a table or graph. During the workshop, participants will engage in a hands-on lesson utilizing these templates followed by a whole group discussion about the possible pedagogical benefits and limitations of this tool.

Project ERNIE Meeting

Boardroom

Friday

1:35 – 2:00

Session 4 **I flipped! My classroom, that is...**

N. Williamsburg

Presenter: Barbara Dolansky – Dutchess Community College

Presenter: Joseph Straight – SUNY Fredonia

This past semester I flipped my Precalculus course. Students watch PDF precast lectures outside of class and work on practice exercises in class. I will share the nuts and bolts of how I run the class, the changes I made throughout the semester, and the challenges I haven't found solutions for.

Session 5 **Deducing the Age of an Ancient Natural Nuclear Reactor in a Pre-Calculus Class**

S. Williamsburg

Presenter: Alexander Atwood – Suffolk County Community College

Presenter: Kimberley Martello – Monroe Community College

A natural nuclear fission reactor was operational approximately 2 Billion years ago in Africa. At that time, the Uranium in this reactor was naturally enriched in Uranium-235 at a level where the reactor could be moderated by ground water flowing through the soil containing the Uranium. By looking at the radioactive decay of Uranium-235 (Half-Life of 0.7 billion years) and of Uranium-238 (Half-Life of 4.5 billion years) and of other radioactive elements created in the reactor, students in a pre-calculus class can calculate the age and operational characteristics of this ancient nuclear reactor.

Friday

2:10 – 3:00

Session 6 **More characters from Statistics**

N. Williamsburg

Presenter: Sean Simpson – Westchester Community College

Presenter: Wadiha Haddad – Monroe Community College

A continuation of a talk from last year where we discuss some of the "characters" from the history of statistics. This time, there will be a greater focus on women and statistics.

Session 7 **Project ERNIE Discussion: What makes a well-rounded Community College Faculty Member?**

S. Williamsburg

Facilitator: Josh Hammond

Session 8 **My Favorite Curves**

East Starfire

Presenter: Joseph Straight – SUNY Fredonia

Presenter: Chris L. Yuen – University at Buffalo

Pop quiz. How many of these curves do you know: cycloid, tractrix, folium of Descartes, Viviani's curve, cissoid of Diocles, Cornu spiral? If you know at least five of them, give yourself an A. But come to my talk, anyway; perhaps you'll learn something new about these curves!

Friday

3:00 – 3:30

Break: Please Visit the Vendor Exhibits

3:35 – 4:25

Free Discussion Time. Feel free to visit the Hickories Park, Downtown Owego, or stay and visit with colleagues. You may want to join in a SUNY GAP Initiative Discussion in the East Starfire room:

Bridging the GAP

Facilitator: Kevin Martz – Corning Community College

The presenter will give a brief overview of the SUNY GAP Initiative then open the floodgates for an open discussion. Has your college changed placement procedures? Has your department discussed acceleration options or how you will offer developmental coursework? Hopefully, after an hour we'll all have a clear idea of how to offer education faster, cheaper, and better!

4:30 – 5:20

Executive Board Meeting

Board Room

5:30 - 6:30

Cocktail Hour

West Starfire

6:30 – 7:30

Dinner (Scholarship and Math League Winners announced)

West Starfire

7:30 – 9:00? Ignite NYSMATYC

West Starfire

Joe Brown

Problem Solving: Don't Just Tell Them What to Do

Anne Prial and Donna Avery

An Innovative Approach to Advancing Developmental Math Students

Lynn Hayes

Math - The Career Common Denominator

Crystal Heshmat

Lessons Learned from Developmental Math Students

Paul Seeburger

Best Practices in Creating Online Homework Problems for Mathematics

Exploring Calculus Concepts Visually

Brian Milleville

Some of the Mathematics of Brewing Beer

Detailed Program: Saturday

6:15 – ????

Estimation Run

Lobby

The Estimation Run on the Saturday morning of the NYSMATYC Conference began as an idea of then President-elect Gerry Lieblich of the Bronx Community College in 1978 in Corning New York. Gerry was looking for a different kind of activity, with different rules. The idea was that running fast was not the goal, but estimating your time was the real goal. That first year the run attracted three runners. They were runners. In subsequent years, Gerry was able to relax the rules a bit and permit walkers and talkers as well as runners. This became a social highlight for a great many conference attendees. Gerry continued to run the Estimation Run until the mid 1990's when he tragically passed away. The run was re-named in Gerry's honor.

Ernie Danforth organized the run for many years, we thank him for his service.

Larry Danforth is now coordinating the "Gerry Lieblich Estimation Run", and he will be waiting for you in the lobby at 6:15 with his stop watch, and instructions.

Saturday

7:00 – 7:50

West Starfire

Breakfast

8:00 – 8:50

Session 13

N. Williamsburg

Skewed Integrals

Presenter: Satyanand Singh – New York City College of Technology

Presenter: Alexander Atwood – Suffolk County Community College

An interesting calculus application will be made to evaluate certain families of skewed integrals via substitution. This method offers an alternative to partial fractions and allows for the elementary evaluation of computationally involved integrals. This presentation is based on my recent article in the Math and Computer Ed Journal.

Session 14

S. Williamsburg

A Journey in a Math Classroom

Presenters: Nadia Benakli – New York City College of Technology
Estela Rojas – New York City College of Technology
Arnavaz Taraporevala – NYC College of Technology

Presenter: Revathi Narasimhan – Kean University

Does learning take place in a math classroom? Is it possible to transform teachers to become more effective in the learning process? Are students good communicators and listeners? The presenters will discuss challenges and different activities that they use to facilitate and assess learning in mathematics.

Saturday
8:00 – 9:50

Session 15 Math On the Web Themed Session

East Starfire

Presenter: Brian Milleville

Veteran Math Teachers Share their experiences using the Internet for their math classes

8:00 – 8:15 George Hurlbert – Corning Community College
Different Ways to Make Videos

8:20 – 8:35 Dave Usinski – Erie Community College
Going, Going, Going Open Educational Resources

8:40 – 9:10 Heather O'Brien – SUNY Jefferson Community College
Donna Stevenson – SUNY Jefferson Community College
An iPad and an Idea: Going 1:1 in a Math Classroom with Pre-service Elementary Teachers

9:15 – 9:50 Paul Seeburger – Monroe Community College
Creating Effective Online Homework exercises using WeBWork

9:00 – 9:50

Session 16 Online Interactivities for Precalculus using Geogebra and Wolfram|Alpha

N. Williamsburg

Presenter: Revathi Narasimhan – Kean University

Presenter: Barbara Dolansky – Dutchess Community College

This presentation will highlight the use of the free software programs, Geogebra and Wolfram|Alpha, to use or create activities for precalculus. Examples include absolute value equations and inequalities, functions, graphs and transformations, and trigonometric functions. Feel free to bring your laptop with Geogebra (www.geogebra.org) installed.

Session 17 **MathDisk: An Interactive Learning Environment**

S. Williamsburg

Presenters: Mohamed Jaffarali

Presenter: Jan Green – Guttman Community College

In this presentation we look at new advances in technology for interactive teaching and learning through the new dynamic geometry software “MathDisk” for School and College Mathematics. MathDisk, which is designed specifically for educational purposes, can help students and teachers to experiment and explore mathematics using web. What distinguishes MathDisk from the numerous other dynamic geometry tools currently available is its approach and philosophy. In almost all the Math tools, trying to do anything beyond graphing a simple 2D function requires writing code using the tool's native programming language. MathDisk on the other hand allows the users to express equations as they see it in their textbooks using “Natural Math Notations”. The equal emphasis to both the symbolic and visual representations of Mathematics makes MathDisk an ideal tool to create online interactive mathematics textbooks. Unlike desktop based applications, MathDisk allows users to share their individual resources and their entire working space over web, a key feature in today’s interconnected world.

9:50 – 10:20 **Break: Please Visit the Vendor Exhibits**

The graphic features a central tablet held by two hands, displaying a video player interface. The video content includes a man speaking and handwritten notes: "Sequence of Odd Numbers 1, 3, 5, ...", "Sequence of Squares 4, 9, ...", and "Honey of Bee" with a diagram of a beehive. Above the tablet, the text "xyz complete course" is displayed in a stylized font. To the left is a logo for "Prealgebra" by Charles P. McKeague and Kate Duffy Pawlik, featuring a circular geometric pattern. To the right is a QR code.

Saturday

10:20 – 11:10

East Starfire

Business Meeting

Agenda follows on page 27

11:20 – 12:10

West Starfire

Lunch (Estimation Run Winners Announced)

12:20 – 1:00

West Starfire

Keynote Address

Don Willner, Mohawk Valley Community College – retired

Don Willner has concluded a long career as a math professor, department head, and center dean at Mohawk Valley Community College. He is also deeply involved with NYSMATYC, and was awarded the “Outstanding Contributions to NYSMATYC” Award in 2001.

Amusement Ride Operator, NASA Analyst, or Math Teacher: What's in a Career?

Saturday

1:15 – 1:40

Session 19 Math in my Real World

N. Williamsburg

Presenter: Amelia Stein – SUNY Broome Community College

Presider: Paul Seeburger – Monroe Community College

Have you ever found yourself reading a textbook word problem and wondering when you would run into the same situation in your daily life? In this presentation I will explore a number of real life situations in which I have found myself needing to apply the Law of Cosines, Pythagorean's Theorem, and more.

Session 20 My First and Last Assignments

S. Williamsburg

Presenter: Abby Gehris – SUNY Broome Community College

Presider: Mohamed Jaffarali

My first and last assignments of the semester involve the students writing me emails to set a goal for class and then reflect on their having met or not met that goal. I have found these assignments to have multiple benefits and enjoy reading them.

1:15- 2:40

Session 21 Common Core Discussion

East Starfire

Presenters: Susan Rothwell and Dave Usinski – Erie Community College

Presider: Lynn Hayes – Corning Community College

Saturday

1:50 – 2:40

Session 22 More Puzzles (Contest!)

N. Williamsburg

Presenters: Kate Danforth – Corning Community College
 Larry Danforth – Jefferson Community College

The puzzle contest is back for the fifth year. Form a team of no more than four people or join a team at the session. Come and have fun for prizes and bragging rights!

Session 23 Mini Presentations

S. Williamsburg

Presenter: Brian Milleville – Erie Community College

Johann Thiel **The Ximera Project**

Painting with light: visualizing mathematical concepts using long-exposure photography

Jaclyn Labozzetta **Methods to Improve Student Practices in Developmental Courses**

Brian Milleville **Keyboard Shortcuts in Microsoft Word's Equation Editor**

Growth at Infinity for Rational Functions—where appropriate?

Saturday
2:50 – 3:40

Session 25 From Exploration to Assessment using Maplesoft Solutions

N. Williamsburg

Presenters: Jonny Zivku –Maplesoft

Presider: Satyanand Singh – New York City College of Technology

Maplesoft's product suite and web resources provide a wide variety of easy-to-use materials to enhance the learning environment. Explore and visualize concepts with Maple, provide online practice problems and automatically grade homework with Maple T.A., and get the help and resources you need from our Teacher Resource Center. This session will be full of examples and advice to get you started.

Session 26 Teaching vs. Educating – Is there a Difference?

S. Williamsburg

Presenter: Ernie Danforth – Corning Community College - retired

Presider: Don Willner – Mohawk Valley Community College - retired

We call ourselves teachers. We call ourselves educators. What does that mean? What is the difference between teaching and educating? Is there any difference? If we don't lecture, does that mean we are not teaching, not educating? These are questions that the presenter will raise. He is not sure we will answer these questions, but come prepared with open minds and prepared to share!

Session 27
East Starfire

MINDTAP Commercial Presentation

Presenter: Vale Leist – Cengage Learning

Presenter: Sophia Georgiakaki – Tompkins Cortland Community College

What separates simple memorization from true understanding? Engagement.

Built on principles of learning design and created hand-in-hand with educators, Cengage Learning solutions focus on engagement, taking students through the levels of application, analysis, and critical thinking with depth and context unmatched in the market. Learn how MindTap allows instructors to personalize the teaching experience with relevant assignments that guide students to analyze, apply, and improve thinking, as well as measure skills and outcomes with ease.

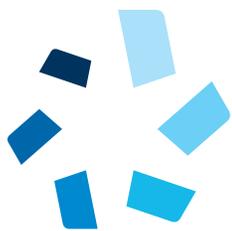
This session will focus on both the instructor and student experience. See how you can:

- Control what students see and when they see it – match your syllabus exactly by hiding, rearranging, or adding your own content.
- Create a unique learning path of relevant readings, multimedia and activities that move students up the learning taxonomy from basic knowledge and comprehension to analysis and application.
- Use powerful analytics and reports that provide a snapshot of class progress, time on task, engagement and completion rates
- Empower students with the information to know where they stand at all times – both individually and compared to the highest performers in class
- Help students stay organized and efficient with a single destination that reflects exactly what's important to you, the instructor.

Provide activities, assignments and built in-study tools that are designed to help students develop problem solving, analysis, and evaluation skills that will immediately transfer to other courses as well as the real world

3:40 – 4:10

Break: Please Visit the Vendor Exhibits



CENGAGE
Learning®

Saturday
4:10 – 5:00

Session 28 Revolutionize the Learning Experience

N. Williamsburg

Presenter: Jennifer Moore – Hawkes Learning Systems

Presenter: Bill Rosenthal – LaGuardia Community College

Hawkes Learning's new browser-based platform will revolutionize the learning experience for your students. Built with the iPad and all other tablets in mind, the courseware is allowing for greater access than ever before. Join us to learn more and be entered in a raffle for a \$50 Amazon gift card!

Session 29 OER for Intermediate Algebra and More

S. Williamsburg

Presenter: Sophia Georgiakaki – Tompkins Cortland Community College

Presenter: Peter Stix – Hudson Valley Community College

Open Educational Resources have been used for fully-online and in-class sections of Intermediate Algebra at Tompkins Cortland Community College as part of the Kaleidoscope grant. This spring, we are implementing OER across all sections of Intermediate Algebra, and we are getting ready for continuation courses. The features of the software used, MyOpenMath, will be demonstrated, and the experiences with the use of OER will be shared.

Session 30 Playing with Multivariable Calculus Concepts Wearing 3D Glasses

East Starfire

Presenter: Paul Seeburger – Monroe Community College

Presenter: Tim Biehler – Finger Lakes Community College

A tour of an NSF-funded project that seeks to develop geometric intuition in students of multivariable calculus. This online exploration environment allows users to create and freely rotate graphs of functions of two variables, contour plots, vectors, points, space curves, vector fields, parametric surfaces, etc. See <http://web.monroecc.edu/calcNSF>. 3D glasses provided!

5:10 – 6:00

Board Room

Executive Board Meeting

Saturday

6:00 – 6:30
West Starfire

Cocktail Half-Hour

6:30 – 8:30
West Starfire

Banquet
Banquet Speaker — Patrick Honner

"Two Views on the Future of Math Education"

Detailed Program: Sunday

7:30 – 8:20 **Breakfast**

West Starfire

8:20 – 8:50

Session 31 **Blending the Mathematics Classroom**

N. Williamsburg

Presenter: Heather Liggett – Onondaga Community College

Presenter: Jerry Tuttle – University of Phoenix

What is a blended class? Is it more like an online course or more like a traditional face-to-face course? All of these questions and more will be answered in my presentation on the blended math classroom. This will be focused on taking a traditional developmental course and switching it to a blended format.

Session 32 **Problematyc!**

S. Williamsburg

Presenter: Ralph Selig – Fairleigh Dickinson University

Presenter: Adam Zuming Li – Borough of Manhattan Community College

This session will focus on Math Trivia presentable for all who enjoy being trivialised!!!!

Session 33 **Increasing number of students majoring in mathematics**

East Starfire

Presenter: Alla Morgulis -- Borough of Manhattan Community College

Presenter: Jacob Amidon – Finger Lakes Community College

This presentation will follow the trends of mathematics enrollment in the last two decades and explore possible reasons for increasing popularity of mathematics major among undergraduate students at a specific community college.

Sunday

9:00 – 9:50

Session 34 Turn up the Volume

N. Williamsburg

Presenter: Peter Stix – Hudson Valley Community College

Presenter: Michael Hellinger – Clinton Community College

Variety of problems/activities involving volume. A number of topics are included (how loud is your iPod? how does volume of a cylinder relate to its surface area? how can we maximize the volume of an open box created from a rectangle? how much less material can be used that will hold the volume of a cereal box? what is the volume of a sphere in dimensions higher than three?) There will be something for everyone from elementary algebra to calculus.

Session 35 Your Students Have a Philosophy of Mathematics

S. Williamsburg

Presenter: Tim Biehler – Finger Lakes Community College

Presenter: Jacob Amidon – Finger Lakes Community College

The philosophy of mathematics is not generally something our students know anything about, or that we even consider in our teaching. Yet most students actually do have a philosophical view about the nature of mathematics, and realizing this can have a big impact on how we teach.

Session 36 Gödel's Theorem

East Starfire

Presenter: Howard Sporn – Queensborough Community College

Presenter: Sandie Han – New York City College of Technology

One of the strangest results in mathematics is Gödel Incompleteness Theorem. Gödel showed that in any axiomatic system of arithmetic, there must be true statements which are not provable. I will introduce the theorem and prove it at level understandable by students taking a liberal arts math course.

Sunday

10:00 – 10:50

Session 37 Why 0.999... Is AND Is Not Equal to 1 (and Why it matters)

N. Williamsburg

Presenter: Bill Rosenthal – LaGuardia Community College

Presenter: Howard Sporn – Queensborough Community College

The question of whether the infinite decimal 0.999... is equal to 1 is both controversial and rarely considered. This highly interactive session will present students' and mathematicians' ideas about the question and include its relevance to larger issues in mathematics learning and teaching.

Session 38 Copyright and math teaching

S. Williamsburg

Presenter: Jerry Tuttle – University of Phoenix

Presenter: Ernie Danforth – Corning Community College - retired

Many teachers think they have greater privilege under so-called Fair Use than the copyright law really permits. What does the copyright law really say? The speaker, who is an insurance company actuary and a teacher, will present some examples and invite the audience to vote on whether the examples are permissible or not.

Session 39 Using mathematics self-efficacy to predict learning behavior and enhance mathematics learning

E. Starfire

Presenter: Sandie Han – New York City College of Technology

Presenter: Heather Liggett – Onondaga Community College

The presenter incorporates mathematics self-efficacy on exams and quizzes in the fundamental algebra course with the goal to heighten students' learning awareness and enhance learning. The presentation will introduce current researches on self-efficacy, and share how students' mathematics self-efficacy can be used to guide mathematics instructions.