IMACC CONFERENCE 2026
General Sessions

Friday, April 10

8:15 - 9:30 AM	General Session #1	Library

Using AI to Learn

Michael Sullivan
Joliet Junior College

Description: With the omnipresence of artificial intelligence students need to learn the pitfalls of overreliance on the tool. Let's discuss how to assist our students in learning how to use AI to serve as a guide in learning rather than a machine for providing answers.

Instructional Technology

2:00 - 3:00 PM	General Session #2	Library

Facilitating Frequent and Mastery Testing with a Computer-Based Testing Facility

Craig Zilles
University of Illinois Urbana-Champaign

Description: Facilitating Frequent and Mastery Testing with a Computer-Based Testing Facility
At the University of Illinois, we've converted a number of computer labs into centrally-proctored testing labs, which we run 12 hours/day, 7 days a week. Students make reservations to take their exams during a 3-day window, and we randomize the contents of the exams to prevent collaborative cheating. Using a sophisticated, open-source web-based question asking platform, we can auto-grade a wide range of numeric, symbolic, and graphing questions and, using downward-facing web cams, can capture students' handwritten derivations for manual grading. Use of institutional computers allows us to prevent access to genAI and other resources and, along with proctors, makes the assessments trustable. Together this infrastructure allows even the largest courses to run frequent assessments (e.g., 50 minute exams every 2 weeks) and offer re-take exams in the off weeks; in Fall 2026 we ran 130,000 exams for 65 courses.

Placement and Assessment
Instructional Technology

7:00 - 8:00 PM	General Session #3	Library

The Secrets of Mental Math

Arthur Benjamin,
Harvey Mudd College and
The National Museum of Mathematics

Description: Dr. Benjamin will demonstrate and explain how to perform rapid mental calculations and other amazing feats of mind.

General Interest

Saturday, April 11

9:20 - 10:20 AM	General Session #4	Library

Modern Introductory Statistics
Michael Sullivan
Joliet Junior College

Description: The Guidelines for Assessment and Instruction in Statistics Education (GAISE) is currently undergoing a revision. Let's discuss how to modernize the Intro Stats course to comply with the recommendations of GAISE. We will explore fun and interesting examples you can use in your class. Don't teach stats? Don't worry, we will entertain you as well.

Statistics

Concurrent Session #1
Friday, April 10 - 9:40 - 10:40 AM

Counterintuitive Results With Probability Models Christopher Riola Moraine Valley Community College	This session will introduce participants to probability results that seem to defy logic. One classic example is the "Monty Hall Problem". Outcomes will be studied empirically, and then shown mathematically. Questions that can be asked to students at various levels will also be discussed. *Statistics* *General Interest*	Library
Calculating a Community of Care to Mitigate Math Anxiety Nabil Kahouadji Northeastern Illinois University	Math anxiety, the most prominent anxiety disorder in an educational setting, is a sadly widespread phenomenon. It influences not only student's performance, focus, and learning behavior, but also their academic and vocational choices which have ramifications for our communities and societies. All of us, not just math teachers, should do their parts in mitigating math anxiety. In this breakout session, we will report on some sad facts about math anxiety, describe two characteristics of math anxiety antecedents, and we will suggest five broad ways to mitigate math anxiety. We will explore, suggest and discuss concrete actions to foster and build a community of care to mitigate math anxiety for all. *Instructional Strategies*	Butternut
Corequisite Mathematics - how we handled it for 3 college level classes Dominica Blalock, Nicole Rempfer, Kyra Rider, Andrew Wang Kishwaukee College	Kishwaukee College has implemented corequisite courses for three of our college level mathematics classes: Topics in Math (Gen Ed math), College Algebra, and most recently Into Statistics. We will share some statistics and general observations. The hope is to have some open discussion regarding corequisites and best practices. *Curriculum Redesign*	Pine

Co-req Course Designs Utilizing ALEKS Alex Thomas, McGraw-Hill ALEKS Specialist	ALEKS is uniquely designed to support a corequisite design due to the AI based functionality of the initial knowledge check which identifies learning gaps and provides an adaptive personalized learning plan as well as just in time reporting for instructors. Our session is aimed at showcasing how ALEKS* can be configured to meet a multitude of effective instructional design strategies aligned to your departmental corequisite set-up. *Both ALEKS PPL and courseware products are ADA compliant and adhere to WCAG 2.1 AA guidelines. *Curriculum Redesign* *Instructional Strategies*	Oak
Progress on the Algebra++ initiative John Chu Algebra++	Algebra++ is a planned series of texts e-published as spreadsheets based on core tenets of computer science (and more broadly cognitive science). Lessons from the evolution of computer programming are used to foster structure and best practices for algebra. Alg++ is designed to cover Beginning->Intermediate->Advanced sequence using the spreadsheet NOT so much as a calculator but as _medium_ for symbolic and graphical reasoning. No programming or spreadsheet knowledge is assumed from students or faculty (but will be learned as a bonus side-effect). Building on previous AMATYC talks, an overview is followed by sample chapters and exercise sets for review, road-test, and faculty input. *Curriculum Redesign* *Developmental Mathematics*	Sun Porch

Concurrent Session #2
Friday, April 10 - 11:00 AM - 12:00 PM

Fusing mathematics and coding to produce artworks Andreas Soemadi Sauk Valley Community College	Construction of an artwork or two will be demonstrated using Wolfram Mathematica. The presenter builds mathematical organisms and guides them toward visual expression. Each image is not just a product but a record of the process, a frozen moment in the evolution of an idea encoded in symbols, functions, and transformations. Hopefully, the artworks can be used to view mathematics not merely as a field of study, but as a generative force of aesthetic wonder. *General Interest* *History of Mathematics*	Library
DERA ... Let's Have an Honest Conversation Brian Mercer Parkland College	When DERA was passed, I walked across the hall and quit my job as department chair. Let's have an honest conversation about what we're all doing 5 years later. I'm no expert, but I'll share what I know and what we're doing. Please come prepared to do the same. *DV-Developmental Mathematics*	Butternut

	CR-Curriculum Redesign	
I Guess We'd Better Talk About PDF Accessibility America Masaros Harper College	Regulatory requirements to make our courses digitally accessible is breathing right down the back of our necks. Are your documents ready? Are you hearing a lot of useless advice? How many times can you be told that Word has headers before you're done? In this talk, I'll briefly cover key concerns in digital accessibility, including: How to make your scanned notes passably accessible! Alt tags for mathematical images! Trials and tribulations of LaTeX accessibility! Someone told me PDF was inherently inaccessible? Oh no, my OER! What even is the point of this exercise? This talk is short, actionable advice specific to math faculty. *IT-Instructional Technology*	Pine
Birds of a Feather: Methods for improving reading comprehension in a mathematics class. Omar Adawi Parkland College John Gately William Rainey Harper College	The session will offer the opportunity to discuss methods for improving reading comprehension of mathematics students at various community colleges in Illinois. *MI -Mathematics Intensive*	Oak

Concurrent Session #3
Friday, April 10 - 3:20 - 4:20 PM

Games You Can't Lose: The Mathematics of Scams and Hustles Dr. Arthur Benjamin Harvey Mudd College and The National Museum of Mathematics	For entertainment and educational purposes only. Audience members are discouraged from applying these methods to nefariously win money from unsuspecting friends or enemies! *G-General Interest*	Library
The Development of a Customizable AI Tutor for the Statistics Classroom Cyrus Vandrevala, Yelda Aydin-Mullen Harper College	At IMACC 2025, we gave a talk which focused on the analysis of various generative AI tools and their integration with Open Educational Resources (OER) for statistics classes at Harper College. Through that exploratory study, we determined that the commercial products that we reviewed did not fit the needs of our students and did not offer the analysis tools that we hoped to see as instructors. Over the past year, we have built our own AI chatbot, backed by OpenAI, which allows students to ask questions and get responses with direct connections to course materials. We ran a small-scale alpha test of the system in the fall 2025 semester and are currently running a beta test of the system this spring 2026 semester. We present an overview of the Harper Z-Bot, some of	Butternut

	the preliminary results that we have collected from the classroom, and future work for the application. *IT-Instructional Technology* *R-Research*	
Strengthening Number Sense in Preservice Elementary Teachers Lisa Blaylock Harper College	Come to this talk to discuss strategies for bolstering number sense among our math for elementary education students. Topics will include how we define number sense and discuss it with our students, how we assess number sense (including a required pass/fail Basic Skills Test which Harper College administers to our math for elementary ed students), resources we provide students for developing and improving their number sense, and problems/interactive activities that address number sense. This is a prepared talk with planned problems and activities, but feel free to bring your ideas and materials if you'd like to share anything! *TP-Teacher Preparation* *IS-Instructional Strategies*	Basement
Factoring Trinomials: More Ways Than You Think Rebecca Goad Joliet Junior College	I will showcase more than ten distinct strategies for factoring trinomials with leading coefficients greater than one, including variations in structure, notation, and "trick" strategies. This math concept has such a beautiful variety of approaches. While most instructors are familiar with a few core approaches, we will explore how different written approaches may influence how students conceptualize and gain confidence in the factoring process. Participants can test their factoring repertoire—there's a prize for anyone who has seen every strategy presented! The session concludes with a brief bonus on how the area model provides a powerful, unifying representation for polynomial multiplication, factoring, and long division. *IS-Instructional Strategies* *DV-Developmental Mathematics*	Pine

Concurrent Session #4
Saturday, April 11, 10:40 - 11:40 AM

Deliver Statistics with Custom Apps Ivan Temesvari Oakton College	This session demonstrates how custom web applications built with **HTML, JavaScript, and KaTeX** can enhance the delivery of statistics concepts in online learning environments such as **D2L, Canvas, and Blackboard**. I showcase several standalone tools developed for introductory statistics courses that allow students to interact with statistical calculations while viewing professionally rendered mathematical notation. The talk also highlights practical techniques for integrating **KaTeX with JavaScript logic** to dynamically generate clear, readable statistical formulas and results within course shells. *S-Statistics*	Library

Beyond Free Beer: Open Educational Resources and Academic Freedom America Masaros Harper College	Beyond Free Beer: Open Educational Resources and Academic Freedom Much of the discourse in Open Educational Resources (OER) is focused around its status as "free-gratis," that is, "free as in free beer," the fact that they are delivered at no cost to students. As an educational tool, OER also has an important "free as in libre," that is, "free as in free speech," component. This talk will discuss ways in which adopting and adapting OER contributes to academic freedom, empowering the individual faculty member and the local department to teach the material in the way they see as most effective, and the ways in which they contribute to flexibility in course redesign. Harper's OER treatment of Quantitative Literacy/General Education Mathematics, as well as my use of OER for Intermediate and College Algebra in my own classes, will be used as case studies. *IS-Instructional Strategies* *CR-Curriculum Redesign*	Butternut
Various Thoughts from 30+ Years of Teaching Amy Madden Moraine Valley CC (retired)	After more than 30 years in the classroom, I have some things to get off my chest! Not really - but I do want to share some resources, ideas, and puzzles. Some I have used in the classroom, some are just for my enjoyment in retirement. *G-General*	Pine
MathGPT.ai: An AI-Powered Platform Built for Math Kate Konieczny MathGPT.ai	Learn how MathGPT.ai provides curriculum-aligned, instructor-led AI tutoring that is accurate, cheat-proof, and infinitely patient – built within a simple assignment management system. This session will highlight how MathGPT.ai supports student understanding, reduces math anxiety, and maintains academic integrity while offering an affordable solution for departments. Faculty will also learn how to explore the platform and participate in Summer or Fall 2026 pilots. *IT-Instructional Technology*	Oak