

# 48th Annual IMACC Conference Program

March 30 through April 1, 2023

## Thursday, March 30

6:00 PM onwards      Check-in, Pick up folders, Social time

## Friday, March 31

7:00 AM - 8:00 AM      Breakfast      Dining Room

8:00 AM - 8:15 AM      Welcome and Announcements      Library

8:15 AM - 9:30 AM      Keynote Session      Library

### "Making Students as Smart as Their Phones & Fixing Their Common Bugs"

Dr. Alan Zollman

Fixing students involves 4 research-based ideas, which are likewise grounded in two important concepts. Come join the conversation as we discuss fixing common myths of algebra, trigonometry, and calculus – all done with a flair of humor!

## 9:40 AM - 10:40 AM      Concurrent Sessions

### "Initial Results from the Transitional Math Program"      Butternut Room

Matthew Wechter

District-wide implementation of the College of Dupage transitional math program started in 2020 and there is finally initial data to share. This talk will promote an open conversation about the successes and failures of transitional math so far. D, GE, PA

### "Leveling the Playing Field"      Oak Room

Cindy Johnson

It is five days before classes start and you are told you have a visually impaired student in one of your classes. How do you adapt your coursework? Pedagogies and resources will be discussed. D, DL, G, GE, IT, MI, P

### "Pointless Grading"      Pine Room

Peter Keep

In this session, I will share my experience transitioning my courses away from a traditional points-based grading system to alternative grading schemes. We will discuss different iterations of these grading schemes, as well as their impact on student success. IS

(more sessions for 9:40 AM - 10:40 AM are continued on the next page)

**"Developmental Education Reform Roundtable"**

**Library**

Ellen Field and Michael Caparula

Join us for our ongoing discussion of how schools are implementing changes due to recent legislation HB2170. Learn how other community colleges in the state have redesigned their remedial math classes and share what's happening at your school. CR, D

**10:40 AM - 11:00 AM**

**Coffee/Tea Break, Exhibits**

**Gallery and Solarium**

**11:00 AM - 12:00 PM**

**Concurrent Sessions**

**"Birds of a Feather: Panel Discussion on Experiences of Online Teaching and Learning"**

**Butternut Room**

Sunil Koswatta & Omar Adawi

The session will offer the opportunity to discuss faculty experiences with online teaching and learning at various community colleges in Illinois. MI

**"Department Chair/Lead Faculty Discussion"**

**Oak Room**

Abby Bailey

This is an open discussion for faculty to hear and share news from around the State. We will talk about the efforts and challenges currently facing community college math departments. You don't need to be a chair to attend. DI

**"Standards Based Grading: The Good, The Bad, and the Ugly"**

**Pine Room**

Matthew Lee

In this session I will introduce standards based grading and discuss its pros and cons. In a sentence, standards based grading is an alternative assessment system focused on growth through revision and reflection. IS, PA

**"Teaching Mathematics with Metaphors"**

**Library**

Robert Cappetta

Sharing cookies is the earliest mathematical metaphor that many students see as a tool for learning arithmetic. Elevator tickets, clothes lines, and flooring are just a few examples of metaphors that may help students internalize more sophisticated concepts. This presentation will examine metaphors for topics that range from arithmetic to calculus and attendees will encouraged to share of their favorites. IS, PA

**12:00 PM - 1:00 PM**

**Lunch**

**Dining Room**

**1:00 PM - 2:00 PM**

**Park Activities, Exhibits**

**Allerton Park**

2:00 PM - 3:00 PM

General Session

Library

**"Let's Talk Bots"**

Robert Cappetta

Internet applications like wolframalpha, photomath, mathway, symbolab and others present opportunities and difficulties for teaching and learning mathematics. How can they best be used to support rather than replace student understanding? Is it possible to design assignments that are more difficult for the bots to solve? G, IT, MI

3:00 PM - 3:20 PM

Coffee/Tea Break, Exhibits

Gallery and Solarium

3:20 PM - 4:20 PM

Concurrent Sessions

**"Math Accessibility Roundtable"**

Michael Caparula and Denise Caparula

Having trouble with accessibility compliance in your tests, homework, and handouts? Confused about what's actually required? After presenting what IS required, attendees will discuss what works for them at their school. DL, GE, IS, IT, MI

Butternut Room

**"Teaching to the Masses: Corequisites"**

Cindy Johnson and Gary Lewis

Responding to state mandates to reduce developmental coursework, Heartland's first attempts were in the preparation for our non-STEM offerings. In this session we will share victories and struggles in scaffolding underprepared students in Statistical and Quantitative Literacy. CR, D, GE, IS

Oak Room

**"Designing Assignments around the Pesky Math Tech and Homework Helpers"**

Peter Keep

Chat AI, PhotoMath, and Integral Solvers, oh no... Instead of putting ourselves in an adversarial position against students and technology, let's investigate some interesting ways of engaging students in deep mathematical thinking while also using these tools. IS, IT

Pine Room

**"DERA: Where We Are Two Years into the Legislation"**

Kathleen Almy

The Developmental Education Reform Act (DERA) has impacted every community college in Illinois. This session will give a status update on implementations based on work being done with over 25 colleges in the state through Women Employed's ASPIRE project and the Partnership for College Completion. CR, D

Library

<b>4:30 PM - 5:30 PM</b>	<b>Committee Meetings, Audit, Exhibits, Social Time</b>	<b>Gallery and Solarium</b>
<b>5:40 PM - 6:50 PM</b>	<b>Dinner and Awards</b>	<b>Dining Room</b>
<b>7:00 PM - 8:00 PM</b>	<b>General Session</b>	<b>Library</b>
	<b>"The Beauty of Mathematics in Gershwin's Jazz "</b>	
	Dr. Paula Wilhite	
	<p>The rhythm and instrumentation of the jazz of George Gershwin, regarded as the most important American musical works of the 20th century, is rich in mathematical design and structure. Selections of Gershwin's wealth of compositions can be attributed to variations created with mathematical systems and will be analyzed for complex patterns and style.</p>	
<b>8:00 PM onwards</b>	<b>Evening Games and Activities (money raised is for the scholarship fund)</b>	

## Saturday, April 1

<b>7:00 AM - 8:20 AM</b>	<b>Breakfast</b>	<b>Dining Room</b>
<b>7:00 AM - 8:20 AM</b>	<b>Board Meeting</b>	<b>Sun Porch</b>
<b>8:30 AM - 9:20 AM</b>	<b>IMACC Business Meeting, Pass the Gavel</b>	<b>Library</b>
<b>9:20 AM - 10:20 AM</b>	<b>General Session</b>	<b>Library</b>
	<b>"The Beauty of Mathematics in Beethoven's Compositions"</b>	
	Dr. Paula Wilhite	
	<p>The beauty of the patterns of mathematics in Ludwig Beethoven's romantic style of musical works may explain how his creativity appeared unaffected by his tragic deafness. Famous compositions from Beethoven's artistry will be examined for complex mathematical design.</p>	
<b>10:20 AM - 10:40 AM</b>	<b>Coffee/Tea Break, Exhibits</b>	<b>Gallery and Solarium</b>

**10:40 AM - 11:40 AM Concurrent Sessions**

**"The Mathematics of Ancient Greece"**

Kyriakos Kypriotakis

**Butternut Room**

Influenced initially by the Egyptians, Greek mathematicians would push on to make breakthroughs such as Pythagoras' theory of right-angled triangles, by focusing on the abstract, bringing clarity and precision to age-old mathematical problems. Their solutions provided the fundamental mathematical building blocks that all future mathematicians and scientists would build upon right up to the present day. H

**"Curve-Fitting Using Determinants"**

Jim Trefzger

**Oak Room**

The simple property that a determinant equals zero if two of its rows are alike can be used to set up otherwise-complicated curve fitting problems. Topics include the three point circle, the five point ellipse, and polynomial curve-fitting. IT, MI

**"Incorporating a Semester-Long Student Led Project into a Statistics Course"**

Dan Kernler

In this session, I'll be discussing my experience incorporating a semester-long project into my statistics courses. I'll share examples, some lessons I've learned along the way, specific project guidelines and rubrics, and we'll hopefully have some discussions about your ideas as well. I've used versions of this project in online, hybrid, and face-to-face sections, all with success. DL, IT, R, S

**Pine Room**

**11:40 AM - 12:00 PM Closing Remarks**

**Library**

**Announcement of the winner of the IMACC Competition**

**Raffle**

**12:00 PM - 1:00 PM Lunch**

**Dining Room**