2015 IMACC Conference Schedule

Thursday, April 9

7:00 - ? Preconference
Pick up folders, meet and greet, history of Allerton

Friday, April 10

7:15 - 8:15 Breakfast Buffet
Tent

8:15 - 9:30 General Session
Dining G,IT
Using Learning Catalytics to Create an Interactive Classroom
Brian Lukoff
Peer instruction and other interactive teaching methods have been shown to dramatically improve conceptual understanding. While no technology is necessary to take advantage of these teaching methods, technology can enable the instructor to better understand student understanding, differentiate instruction, and facilitate more productive student discussions in the classroom. This workshop will introduce Learning Catalytics, a cloud-based platform for interactive teaching that allows students to use web-enabled devices – laptops, smartphones, and tablets – to engage in rich, authentic tasks in class and allows instructors to go beyond clickers and other response systems to create an interactive environment that integrates assessment with learning.

9:40 - 10:40 Concurrent Sessions
Library ST,IT,IS
A Twenty-First Century Education – The Inverted Classroom
Mike Sullivan
With the advent of tools that allow for easy creation of video and other multimedia content, the inverted, or flipped, classroom is fast becoming a new and innovative approach to instruction. This session will focus on what an inverted class is, the rationale behind flipping, and some ideas for incorporating the flipped classroom. I will also demonstrate a new digital product for statistics that may be used in this format and share some of the activities that I do during class time. Finally, data is shared (both anecdotal and real) that addresses the efficacy of the flipped model. Bring your web-enabled laptop, tablet, or smart-phone for an engaging, interactive experience.

Oak G,DI,IS
New Math Professors are Welcome Here
Tom Pulver
Join this panel discussion to share with other math professors those best practices that you have learned or developed as a new (or not so new instructor). Or bring some of the frustrations that did not work. Learn what other instructors do for student motivation, homework management, test (and make up test) management, use of tools and technology, classroom practices, and other tricks of our trade. We will also discuss the role of IMACC, the IMACC Conference at Allerton, and State policies and resources such as ICCB and IAI. While this session is meant for those new or fairly new to our profession, we certainly welcome the more experienced to come and share their sage advice.
<table>
<thead>
<tr>
<th>Time</th>
<th>Location</th>
<th>Concurrent Sessions</th>
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<tbody>
<tr>
<td>9:40 - 10:40</td>
<td>Pine MI</td>
<td><strong>Calculus Sequence Discussion</strong>&lt;br&gt;&lt;i&gt;Bob Cappetta&lt;/i&gt;&lt;br&gt;&lt;br&gt;This session will offer the opportunity to discuss the arrangement and number of topics in the calculus sequence at the various community colleges in Illinois, the incorporation of technology, and some strategies for teaching these courses.</td>
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<td></td>
<td>Butternut TP,D</td>
<td><strong>A Conceptual Approach to Fractions</strong>&lt;br&gt;&lt;i&gt;Roberta Christie&lt;/i&gt;&lt;br&gt;&lt;br&gt;Problems will be shared that help create and assess number sense for fractions. This combination of hands-on manipulatives and interesting fraction questions help Elementary Education majors work with the common core standards and help developmental students understand fractions are not just symbol manipulation.</td>
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<td>Basement D,IS</td>
<td><strong>Modeling with the Developmental Student</strong>&lt;br&gt;&lt;i&gt;Kathleen Almy&lt;/i&gt;&lt;br&gt;&lt;br&gt;In courses like PMGE, the ability to model a situation mathematically is a core objective. This session will explore ways to help students achieve this goal using algebra, tables, graphs, and Excel. Sample problems and activities will be shared.</td>
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<td>Brick DI</td>
<td><strong>Creating a Cohesive Department</strong>&lt;br&gt;&lt;i&gt;Dan Kernler &amp; Nicole Scherger&lt;/i&gt;&lt;br&gt;&lt;br&gt;Everyone wants to feel valued in his or her workplace. Faculty are no different, and this session will address various methods to build a cohesive department. Ideas discussed will include a handbook for adjuncts, a mentoring program for new faculty, scheduling courses, informal gatherings, decision making, and running department meetings.</td>
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<tr>
<td>10:00</td>
<td>Dining</td>
<td><strong>Retirees</strong>&lt;br&gt;&lt;i&gt;Jim Trefzger&lt;/i&gt;&lt;br&gt;&lt;br&gt;Meet and greet</td>
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<tr>
<td>10:40 - 11:00</td>
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<td><strong>Coffee Break, Exhibits</strong></td>
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<td>11:00 - 12:00</td>
<td>Library G</td>
<td><strong>Launching a Community College Math Circle</strong>&lt;br&gt;&lt;i&gt;Chris Cunningham&lt;/i&gt;&lt;br&gt;&lt;br&gt;This year we piloted the Waubonsee Math Circle, in which interested local high school students come to the community college on Saturdays to do mathematics for fun. I’ll share my experiences and missteps and we’ll explore the free book Circle in a Box, which outlines best practices on starting a math circle.</td>
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<td>Oak DI</td>
<td><strong>Mathematics Department Chair Discussion</strong>&lt;br&gt;&lt;i&gt;Keven Hansen&lt;/i&gt;&lt;br&gt;&lt;br&gt;This discussion will focus on the many issues facing mathematics department chairs and leaders in community college mathematics in Illinois.</td>
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<td>Pine MI,IT,GE</td>
<td><strong>Lightning Talks: Calculus Gems, Technology Tidbits, and Probability</strong>&lt;br&gt;&lt;i&gt;Cody Nitschke, David Miller, Andrew Mansheim, Chris Appuhn&lt;/i&gt;&lt;br&gt;&lt;br&gt;First we will examine the three-body problem, an application of differential equations to physics and mechanics. Then we will discuss interactive figures, including where to find them and ways to incorporate them in the classroom. Next we will explore computations involving basic probability concepts. Finally we will consider some interesting extensions and generalizations of calculus facts regarding infinite series.</td>
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11:00 - 12:00 Concurrent Sessions (continued)

Butternut Mentoring
DI
*Katy Koe & Barbra Burdett*

We all need people to help us find the way. This workshop takes you on a quest to find the guiding light. We are going to recount our own mentoring experiences not in just our own voice but also the voice of other people. We will begin the workshop by describing different types of mentors and then quickly narrow it down to an experienced teacher working with a new teacher to encourage them and to guide them. Eventually and hopefully mentors hand the education of our students to the mentee. You will see how this helps us find our way to a better and fuller life.

Basement Making Math Lit Work: Managing Groups and Student Expectations
CR,D
*Erin Wilding-Martin & Brian Mercer*

The new pathway (Math Lit, PMGE, etc) for non-STEM developmental math students is an exciting opportunity to make big changes in developmental math, but it also brings some challenges. Come hear about how the folks at Parkland College are handling two related challenges: managing groups and dealing with student expectations. Bring your own ideas and best practices to share.

Dining Retiree Break-Out Session

Jim Trefzger

12:00 - 1:00 Lunch Buffet & Open Microphone

Tent

1:30 - 2:20 General Session

Dining Humor and History Two Bridges to Mathematical Learning
*Marv Johnson, Past-President 1993-1994*

This talk emphasizes uses of humor and history that can be used to create ties to particular mathematical concepts.

2:30 - 3:30 Concurrent Sessions

Library Learning Catalytics: Workshop
IT
*Brian Lukoff*

This session will expand on the discussion of Learning Catalytics in the general session with a workshop on how to use Learning Catalytics in the classroom. We will demonstrate how to teach with Learning Catalytics in the classroom as well as discuss pedagogical strategies for building effective interactive activities. Please bring your web-enabled devices to this workshop.

Oak Current and Historical Events Motivate Mathematical Modeling Problem Solving and Critical Thinking
GE,G,D,IS
*Jon Odell*

“When are we ever going to use this?” is examined by current and historical events. A variety of problems motivated by current and historical events are used to illustrate a mathematical approach to problem solving and critical thinking.

Pine Birds of a Feather: Panel Discussion on Precalculus
MI
*Omar Adawi & Sunil Koswatta*

This session will offer the opportunity to discuss the arrangement and number of topics in precalculus at various community colleges in Illinois, the incorporation of technology, and some strategies for teaching this course.
2:30 - 3:30 Concurrent Sessions (continued)

**Butternut D,GE,MI,TP**

**So What About Those Teacher Pensions? A lesson in compound Interest and other exponential ideas.**

*Linda Blanco*

Students, like lawmakers, don’t understand the concept of compound interest. In this session I will show how a little serendipity brought me to a teachable moment in precalculus. (However, the initial ideas were based on what I used to teach to high school general mathematics students.) Students should have come away with the understanding that the snowball effect of compound interest relies on patience and consistency. We will not solve the pension crisis, but lawmakers are welcome to attend!

**Basement CR,D**

**What the Heck is Essential Intermediate Algebra?**

*David Anderson, Diane Grzeczka, Gina Mrozek & Pat O’Leary*

In the fall of 2011, South Suburban College began offering an alternative intermediate algebra course for students planning to take a non-STEM general education math course. The session will provide an overview of the course content and organization, a summary of student data, and first hand observations from instructors who have taught the course. This course was developed before PMGE came into existence, but it was developed in the same spirit.

3:30 - 4:30 Park Activities and Exhibits

4:40 - 5:40 Social Hour and Committee Meetings

- **Oak** Membership Committee
- **Pine** Curriculum Committee

5:40 - 6:50 Dinner and Awards

Tent

7:00 - 8:00 Evening Program

Tent

**Songs and Poetry – Music and Metre for Mathematics**

*Marv Johnson*

This is a collection of songs and poems that have some fun with mathematical concepts.

8:00 - ? Evening Activities: Games, Scholarship Fundraising

- **Oak** Grading Table
- **Butternut** Guitar Group
- **Basement** Chutes & Ladders, Wii Bowling, Billiards, Poker
- **Main Hall** Backgammon, Bridge

8:10 - ? Board Meeting

Pine

**Saturday, April 11**

7:15 - 8:15 Breakfast Buffet

Tent
8:15 - 9:15 IMACC Business Meeting
Library

9:25 - 10:25 General Session
Dining
Mathematics Education in Illinois-Where We Are Headed
*Brian Durham, ICCB Deputy Director of Academic Affairs*
This session will review changes across the policy landscape that may impact mathematics education. Included among this discussion are issues related to the PARCC assessment, developmental math, co-requisite remediation, the Illinois Articulation Initiative, and other areas. The audience will be encouraged to ask questions throughout the presentation. The goal is a robust policy discussion.

10:40 - 11:40 Concurrent Sessions
Library
**Update on Illinois Community College Board**
*Tom Pulver, ICCB Board Member*
This session will give an update on the current issues facing the ICCB and the State Community College Systems. Of particular interest may be the effect of reduced funding, any changes brought on by new leadership in the Governor’s office, Developmental Education, and the observance of the 50th anniversary of the State Community College Act.

Oak
**Learning: Anytime, Anywhere**
*Sara Tyler, Hawkes Learning*
Hawkes Learning believes in offering affordable and accessible materials. Their comprehensive learning system is built and based on the principle of mastery learning to ensure that each student develops a solid foundation and deep understanding of the curriculum. This competency-based approach adapts to each student’s individual needs and has a proven track record of increasing student success. Learn about the new tablet-friendly platform that requires no installation or plug-ins.

Pine
**Problem Solving and Critical Thinking Revisited**
*Roberta Christie*
True problem solving where every problem is different. Sure the problems are fun and unusual. But this time I will go into more detail in how to teach in this unusual style. Pop quizzes, problem extensions and class room management are quite different.

Butternut
**Do Your Students Want a “Free” Stats Textbook?**
*Scott Reed*
The College of Lake County used the textbook Introductory Statistics by OpenStax College this past fall 2014 semester. It is an OER (Open Educational Resource) textbook billed on their website as a “high-quality, free, open” text. It proved to be a decent main stream college level elementary statistics text.

Basement
**Mindset: What Is It, and Can We Change It?**
*Dan Kernler & Greg Wheaton*
Mindset is a topic many have heard of, but do we really know what it is and how it can cripple our students – or even ourselves? In this session, the difference between a “fixed” and “growth” mindset will be defined, as will how these various mindsets manifest themselves in our students. Attendees will also have an opportunity to investigate their own mindset, and how that mindset can affect their professional growth as mathematics faculty.
Parallel Sessions (continued)

**Brick**
**POWER Students**
*Kim Boyke*

The College of Lake County has begun a POWER student program in its Arithmetic/Pre-Algebra sections. This program selects students from last semester’s successful course graduates to serve as embedded role models, note-takers, and Algebra I “spies”. Although this program is in its infancy, the benefits to the class and the selected student are numerous.

**Library**
**Closing Session**

Contest results, raffle, closing remarks, passing of the gavel

**Tent**
**Lunch Buffet**

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**Key to Program Codes**

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<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>CR</td>
<td>Curriculum Redesign (restructuring content or delivery of a course or sequence of courses)</td>
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<tr>
<td>D</td>
<td>Developmental Mathematics</td>
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<tr>
<td>DI</td>
<td>Department/Division Issues (adjunct faculty, mentoring new faculty, math labs, interdisciplinary classes or projects, tutoring, administrative issues)</td>
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<tr>
<td>DL</td>
<td>Distance Learning (hybrid or online Classes)</td>
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<td>G</td>
<td>General Interest</td>
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<tr>
<td>GC</td>
<td>Global and Cultural Education (awareness of mathematics in other cultures, and appreciation of our role as educators with global citizenship)</td>
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<tr>
<td>GE</td>
<td>Mathematics for General Education (finite mathematics, liberal arts, quantitative literacy)</td>
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<tr>
<td>H</td>
<td>History of Mathematics</td>
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<tr>
<td>IS</td>
<td>Instructional Strategies (learning styles, teaching methodologies, addressing math anxiety and study skills)</td>
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<tr>
<td>IT</td>
<td>Instructional Technology (computer software, internet resources, graphing calculators, etc.)</td>
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<tr>
<td>MI</td>
<td>Mathematics Intensive (college algebra, precalculus, and beyond)</td>
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<tr>
<td>PA</td>
<td>Placement and Assessment (classroom, course, and program)</td>
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<tr>
<td>R</td>
<td>Research (includes research results or based on research)</td>
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<tr>
<td>ST</td>
<td>Statistics</td>
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<tr>
<td>TP</td>
<td>Teacher Preparation (preparing to teach mathematics at any level)</td>
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Last updated: March 17, 2015, at 2:28 pm