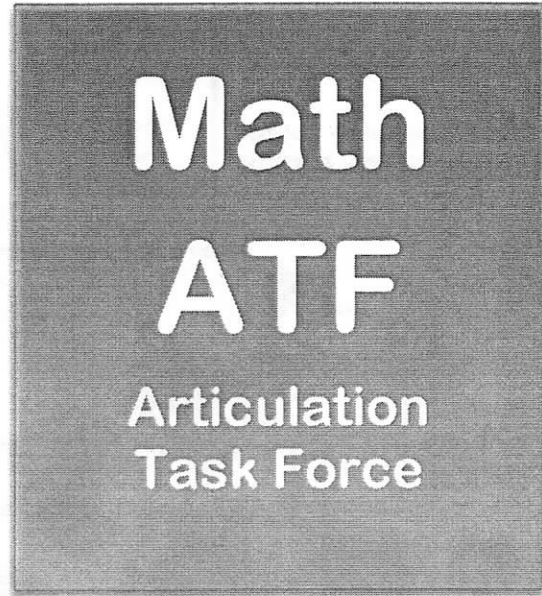
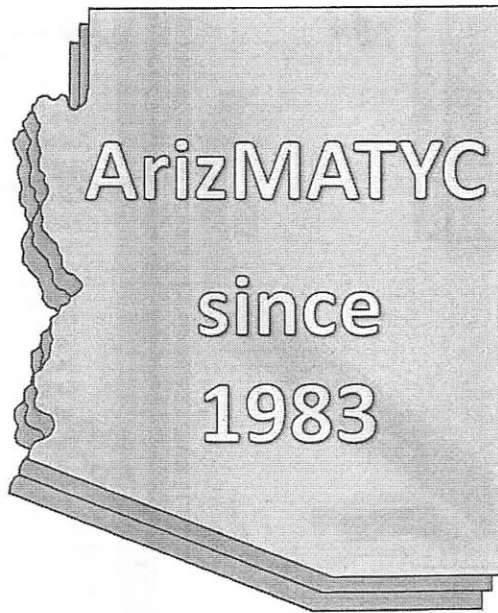


Spring 2017



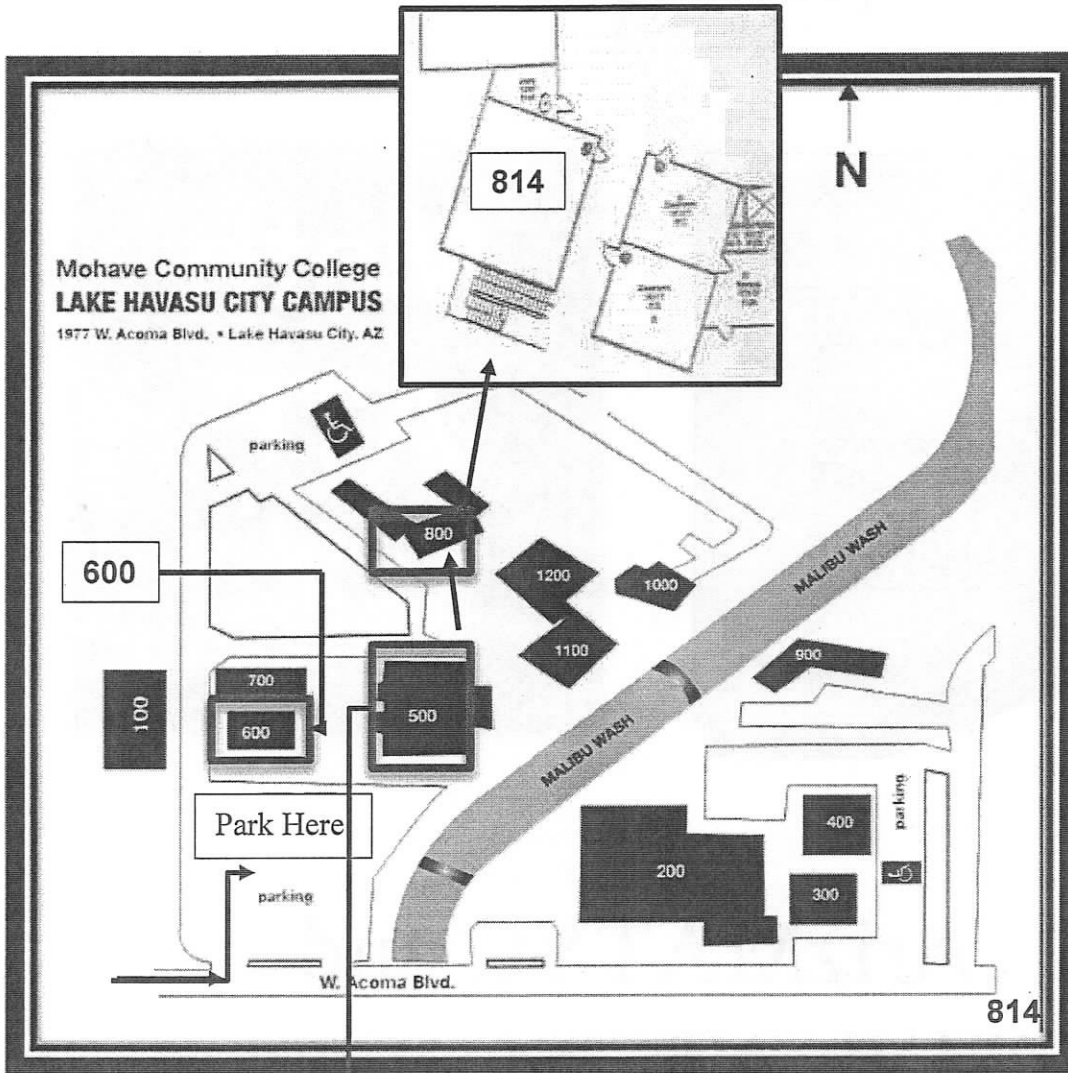
ArizMATYC and  
Math ATF Meeting  
at

Mohave Community College  
Friday, March 31, 2017

**MCC** Mohave  
Community  
College

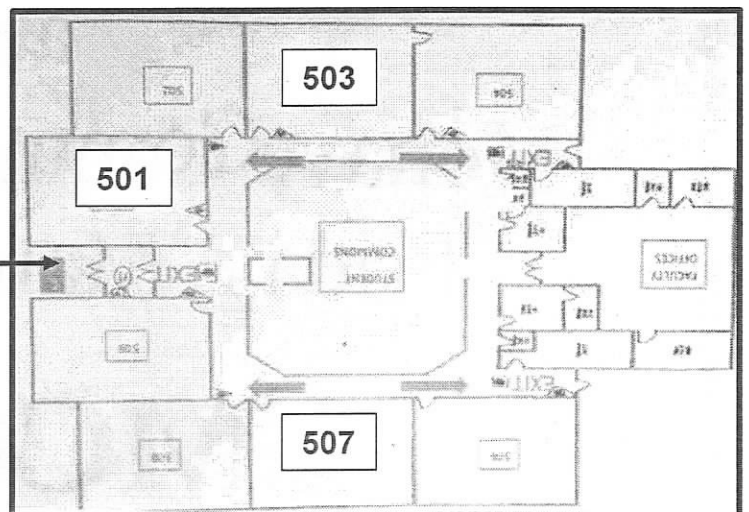
# MAPS

## Room Location



## Campus Directory

- 100 HVAC Lab  
Sculpture  
Ceramics  
Art  
Jewelry  
Lapidary
- 200 Campus Administration  
Academic Advising  
Student Services  
Testing  
Disabilities Services  
Financial Aid  
College Prep Services  
Registration  
Community Outreach  
NAU
- 300 Classrooms
- 400 Chemistry Lab  
Biology Lab
- 500 Classrooms
- 600 Multipurpose Room
- 700 Student Lounge  
Fitness Center
- 800 Classrooms
- 900 Maintenance Dept.
- 1000 Bookstore
- 1100 Nursing
- 1200 Library & Computer Lab



# Schedule

## 8:30-9:00 am Registration and Breakfast

Room 600

Please join us for continental breakfast in room 600.

## 9:00-9:25 am Welcome and Information

Room 600

Welcome and Information

*Jann Woods, MCC-LHC Campus Dean  
Dr. Stephane Dieringer, Associate Dean of Instruction  
April Strom, ArizMATYC President  
Kate Kozack, AMATYC Southwest Vice President*

## 9:30-10:20 am Breakout Session I

500, 600 Buildings

### Why are we Still Using Graphing Calculators?

Room 507

*Matthew Thomas Michaelson, Glendale Community College*

Strand: Technology in Teaching

Although graphing calculators are antiquated technology, many instructors continue to teach with them, and so even insist that students spend more than \$100 to buy one for their class. With so many online technologies available for free, mathematics instruction should move away from graphing calculators and toward more modern technologies. This talk will demonstrate desmos.com, a free online graphing calculator that can do so much more with much greater ease.

### Continuing Evaluation of Mathematics Placement Changes at Northern Arizona University

Room 600

*Katie Louchart, Northern Arizona University*

Strand: Undergraduate Mathematics

Over the last several years, math placement at NAU has undergone several significant changes. In this talk, we will give an overview of those changes and we will share some of their results and effects.

### Decision Making with Single Transferable Voting

Room 501

*Logan Paul Cameron, Gateway Community College*

Strand: Student Project

The "winner-takes-all" method is a common decision making process used to determine a group's preferred choice, and is used in groups and electoral systems throughout the world. Unfortunately, this method results in outcomes which are unrepresentative of the individuals within the group, therefore, an ineffective method of consensus. Single transferable voting (STV) is a system which uses fractions and logic to reach a decision that reaches a greater majority than the winner-takes-all system. Gateway Community College's Math Club utilized STV for three semesters and the results displayed the serious advantages of the STV method over the winner-takes-all.



## Quantitative Reasoning in Arizona

Room 503

*Jeffrey Hovermill, Northern Arizona University*

*With Matt Fahy, Northern Arizona University, Jennifer Jameson, Coconino Community College, Alicia Collins, Mesa Community College, and Denise Nunley, Scottsdale Community College*

Strands: Undergraduate Mathematics, Programs for Pre-service and In-service Teachers

This presentation will share information about our Arizona Board of Regents' grant funded project QRinAZ. This 2-year project partners NAU with 4 Community Colleges, 12 high-needs school district, and dozens of schools, teachers, and administrators regarding Quantitative Reasoning curriculum and instruction. We look forward to sharing recent policy and practices associated with QR with other interested mathematics educators.

### 10:30-11:20 am Breakout Session II

500, 600 Buildings

#### Misophonia in the Mathematics Classroom

Room 507

*Mathew Michaelson, Glendale Community College*

Strand: Math Anxiety

Many college and university students already have to deal with a great amount of anxiety when sitting in a mathematics classroom. Some of these students have the added burden of suffering in silence with a psychological condition called misophonia. Their "hatred of sound" can easily distract them as they become fixated on sound triggers, such as gum chewing and popping, pen clicking, sniffing, and other sounds that are just annoying to other people. This talk will bring awareness to misophonia while offering some suggestions on how to support students who might suffer from the condition.

#### Math Placement Roundtable Discussion

Room 600

*Katie Louchart (NAU), Tina Moore (A of U), and Fabio Milner (ASU)*

Strand: Undergraduate Mathematics

The panelists and the audience will discuss current math placement procedures as well as future math placement plans and goals.

#### Rock Paper Scissors...Can You Win?

Room 501

*Denise Nunley, Scottsdale Community College*

Strand: Undergraduate Mathematics, Teaching Mathematics

This talk will have participants play the game Rock Paper Scissors with the intent of discovering the probabilities behind the game, and then looking at how to win at Rock Paper Scissors if it is possible or not. The goal of the presentation is for instructors in Quantitative reasoning courses that teach probability to have a readymade activity that they can do with their students.

### 11:30 am-1:00 pm Lunch and Campus Reports

Room 600

Please join us for lunch in room 600. During the Campus Reports we ask a representative from each campus to share what is new at his or her college.

**1:00-1:50 pm Math Articulation Task Force (ATF)****Room 600**

The Math Articulation Task Force, comprised of faculty from community colleges and universities, strives to keep the articulation process smooth for students by an ongoing dialog of issues and concerns of transfer students. All are invited to attend this important discussion.

**1:00-1:50 pm Breakout Session III****500, 600 Buildings****Mathematics ATF Meeting****Room 600****Using Quizzes to Improve Student Engagement****Room 503***Aman Ghebremicael, Arizona Western College*

Strands: Developmental Education, Mathematics Education Research

A couple of semesters ago in an effort to improve student classroom engagement, a single class was setup in such a way that students class assignment (quiz) is only accepted if they have all the questions correct. This presentation will discuss the outcomes from the setup compared to previously-used traditional teaching methodologies. Besides to the advantages and disadvantages of the set up, we will also discuss on how to modify and/or implement the set up to other classes.

**You're ready to Flip, but are they?****Room 501***Alicia Collins, Mesa Community College*

Strands: Technology in Teaching, Undergraduate Mathematics

This presentation will walk participants through ideas for replacing the traditional lecture in the liberal arts math course with engaging instructional activities that are relevant and necessary beyond the classroom. We will discuss how to promote student readiness for the in-class activities and share ready to go classwork that can be implement in your liberal arts course. During this presentation participants will share results as they solve the problems presented. These results will be immediately displayed allowing for further discussion and redirection.

**2:00-2:50 pm Breakout Session IV****500, 600, 800 Buildings****"Refresh Before Your Test": YOUR Role in Student Placement and Success** **Room 507***Rachel DeAlejandro and Shannon Ruth, Gateway Community College*

Strands: Developmental Education, Placement and Assessment

When students appear on your roster, do you know how they got there? Did they test in, or did they take the prerequisite course? A free resource called Power Math Camp could be the missing link to ensure your students are properly placed and prepared. You'll leave ready to implement!

### **Student Solutions to some Interesting Tiling Problems**

**Room 814**

*David Dudley, Scottsdale Community College*

Strand: Research Completed by Students (Undergraduate or Graduate)

Samples from a student Problem of the Week contest will be discussed. They include "How can 31 dominos cover a checkerboard with two opposing corners removed?" and others. Audience members will seek solutions using hands-on manipulatives. Students' creative solutions to these and other problems will be shared.

### **Mentoring Undergraduate Students in Mathematical Biology Research**

**Room 501**

*Aprillya Lanz and Griselle Torres-Garcia, Grand Canyon University*

Strands: Research Completed by Students (Undergraduate or Graduate), Mentoring Undergraduates

Undergraduate research facilitates the enrichment of students' academic growth by providing students with substantial experience to prepare them for their future academic and professional careers. The successful participation of deserving students will enhance their undergraduate experience and it will also inspire their desire to pursue graduate education. Effort that has been put in place to initiate mathematics undergraduate research activities will be discussed as well as some successful strategies in mentoring undergraduates. Opportunities to establish undergraduate research program/activities and opportunities for students to participate in such programs will also be presented.

**2:50-3:00 pm Afternoon Break**

**Room 814**

Please join us in room 814 for an afternoon break—there will be cookies!

**3:00-3:50 pm ArizMATYC Business Meeting**

**Room 814**

### **ArizMATYC Business Meeting**

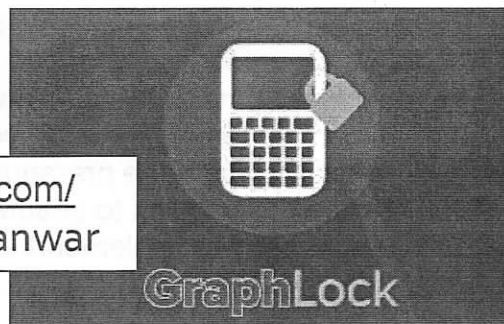
**Room 814**

Please join us for the ArizMATYC Business Meeting during which we discuss future locations for meetings, AMATYC delegate issues, and any concerns of members of the organization. All are welcome to attend.

**We thank our sponsors  
for their continued support of ArizMATYC!**

**MCC** Mohave  
Community  
College

<http://graphlock.com/>  
Vijayant "VJ" Kanwar



ArizMATYC Spring Conference  
 Mohave Community College—Lake Havasu Campus  
 Meeting Schedule Overview  
 March 31, 2017

8:30 – 9:00 am	Registration and Continental Breakfast	600 Building (Room 600)
9:00 – 9:25 am	<b>Welcome, Introductions and Information</b>	600 Building (Room 600)
9:30 am – 10:20 am	<b>Breakout Session I</b>	500 Building (501, 503, 507) 600 Building
10:20 am – 10:30 am	Break	Break
10:30 am – 11:20 am	<b>Breakout Session II</b>	500 Building (501, 507) 600 Building
11:20 – 10:30 am	Break	Break
11:30 am – 1:00 pm	<b>Lunch and College/Campus Reports</b>	600 Building (Room 600)
1:00 – 1:50 pm	<b>Breakout Session III, ATF Meeting</b>	500 Building (501, 503) ATF Meeting: 600 Building (Room 600)
1:50 pm – 2:00 pm	Break	Break
2:00 – 2:50 pm	<b>Breakout Session IV</b>	500 Building (501, 507) 800 Building (814)
2:50 – 3:00 pm	Break: Explore room 814's environment—there will be cookies!	Break (Room 814)
3:00 – 3:50 pm	<b>ArizMATYC Business Meeting</b>	800 Building (814)

## Breakout Session Overview

Breakout Session I: 9:30 – 10:20 am			
<b>Why are we still using graphing calculators?</b> Matthew Michaelson Glendale CC Room 507	<b>Continuing evaluation of mathematics placement changes at Northern Arizona University</b> Katie Louchart NAU Room 600	<b>Decision making with single transferable voting</b> Logan Paul Cameron Student Presentation Gateway CC Room 501	<b>Quantitative Reasoning in Arizona</b> Jeffrey Hovermill (NAU) Matt Fahy, Jennifer Jameson, Alicia Collins and Denise Nunley Room 503
Breakout Session II: 10:30 – 11:20 am			
<b>Misophonia in the mathematics classroom</b> Matthew Michaelson Glendale CC Room 507	<b>Math placement roundtable discussion</b> Katie Louchart (NAU), Tina Moore (U of A), Fabio Milner (ASU) Room 600	<b>Rock Paper Scissors...Can You Win?</b> Denise Nunley Scottsdale CC Room 501	
Lunch, College Reports: 11:30 am – 1:00 pm Room 600			
Breakout Session III: 1:00 – 1:50 pm			
	<b>Mathematics ATF Meeting</b> Room 600	<b>You're ready to flip, but are they?</b> Alicia Collins Mesa CC Room 501	<b>Using quizzes to improve student engagement</b> Aman Ghebremicael Arizona Western Room 503
Breakout Session IV: 2:00 – 2:50 pm			
<b>"Refresh Before You Test": YOUR role in student placement and success</b> Rachel DeAlejandro and Shannon Ruth Gateway CC Room 507	<b>Student solutions to some interesting tiling problems</b> David Dudley Scottsdale CC Room 814	<b>Mentoring undergraduate students in mathematical biology research</b> Aprillya Lanz and Griselle Torres-Garcia Grand Canyon University Room 501	
ArizMATYC Business Meeting 3:00 – 3:50 pm Room 814			