Virtual

2020 CMC^3 Fall Mathematics Conference

Friday, December 11, 2020

4:45 pm to 7:30 pm (PST)

Saturday, December 12, 2020

9:30 am to 2:15 pm (PST)

Registration for the conference is free and includes one year of membership in CMC^3

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4:45 pm to 5:00 pm (PST)

Conference Opening and Welcome

Barbara Illowsky, PhD

Professor Emerita
De Anza College

Richard Rasiej

Mathematics Instructor
Santa Monica College

Friday, December 11, 2020
5:00 pm to 6:00 pm (PST)

A CA Success: A FREE Co-Req College-Ready Math System for Students

Most products, services and Open Educational Resource math offerings are not designed to remediate the specific patterns of failure and success for each student in the range of math competencies from high school Algebra through Pre-Calculus in college. Rather they are course systems or practice tools. National University in collaboration with several community colleges in California, and with high schools and CSU campuses, have piloted a competency-based, adaptive, personalized system called Precision Math. In controlled tests at National, students perform better through this individualized approach that includes social-emotional factors. Faculty receive near real-time data and feedback on the progress and gaps in student math learning to better support their progress. Participants will experience a demonstration of the system and will learn about how this can be an effective way to design and deliver co-requisite courses to support student success.

Pat McKeague

Educator, Author, and Owner of
XYZ Textbooks & MathTV.com

Friday, December 11, 2020
5:00 pm to 6:00 pm (PST)

Why do we call it Algebra?

To answer our question we enter the city of Baghdad in the year 820 and find a diverse population, living in relative harmony, and collaborating on projects in mathematics and science that have benefited the rest of the world ever since. As we follow the projects from Baghdad to Spain, and then into Europe, we see a picture of the Middle East that is different from the one we see in the media today. The story embraces diversity. We find people and cultures that we identify with, giving our students a new, more inclusive, perspective on the world we live in today. This presentation has lots of good content for your online courses.

George Woodbury

Professor of Mathematics
College of the Sequoias

Friday, December 11, 2020
5:00 pm to 6:00 pm (PST)

Introducing Inferential Statistics Early In The Course

Inferential statistics is one of the most important topics in an introductory statistics course. Instead of waiting until the end of the course to introduce inferential statistics, please consider moving it early in the semester. In this talk you will learn how to introduce the one-proportion test in the first few weeks of the course by using coin-flipping simulation. The topic can be revisited while covering the binomial probability distribution, before finally covering the standard one-proportion test at the end of the semester. In addition to the one-proportion test, there will be a discussion of how randomization and bootstrapping can be used to help students develop intuition for hypothesis testing.

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6:00 pm to 6:30 pm (PST)

Conference Cocktail
and
Social Distancing

Visit the CMC^3 website for more details and current information about the conference

www.cmc3.org

Be sure to update to the latest version of Zoom before our virtual conference

Jessica Bernards

Professor of Mathematics
Portland Community College

Friday, December 11, 2020
6:30 pm to 7:30 pm (PST)

Growth Mindset: The foundation to success in Mathematics

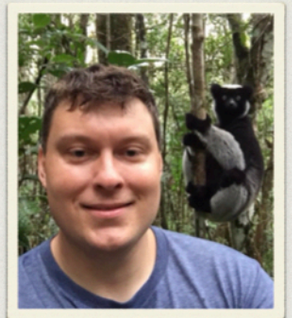
Growth mindset has become a familiar buzz word over the last few years, but how does it relate specifically to math? The presentation will discuss what growth mindset looks like in a math class, the importance of it, and how you can foster this trait in your students.

Friday Keynote Speaker

2020 CMC^3 Virtual Fall Mathematics Conference

Virtual Conference Norms

- Be respectful and professional at all times
- Post questions and comments in the chat
- Remain muted until invited to speak
- Show your video when possible
- Display your name and college (Name @ College)
- Update to the latest version of Zoom



Mike Greenberg

Professor of Mathematics

City College of San Francisco

Saturday, December 12, 2020
9:30 am to 10:30 am (PST)

Engaging Students Online Through a Variety of Interactive, Asynchronous Activities

Are you choosing between live Zoom lectures and asynchronous YouTube videos? There's so much more out there, and you can give your students more options for engaging with the content and each other. I will give a brief overview of how I have structured my distance learning courses this semester, and then I will present several interactive online activities that I have incorporated into my classes. These include vocabulary flashcards, low-stakes quiz games, choose-your-own-adventure-style learning activities, and structured discussions that encourage participation on multiple cognitive levels.

Kevin Shryock

Professor of Mathematics

Northern Illinois University

Saturday, December 12, 2020
9:30 am to 10:30 am (PST)

How to Run a Self-Reflection Classroom (and Its Effect on Student Success)

In this session, Professor Shryock of Northern Illinois University will examine the effect of replacing performance grades with self-reflection exercises in his Calculus 1 classroom. He will also share his experiences creating this framework, as well as assess the validity of his “plug-and-play” classroom with other students, teachers, schools and subjects.

Michael Sullivan

Professor of Mathematics

Joliet Junior College

Saturday, December 12, 2020
9:30 am to 10:30 am (PST)

Using Real Data to Illustrate Statistical Concepts

How do we incorporate relevant and interesting data in our classrooms? How do we obtain such data? And, how do we disseminate and analyze such data? This presentation focuses on the power of using real data to illustrate statistical concepts in your class, including sampling distributions, confidence intervals, and hypothesis testing.

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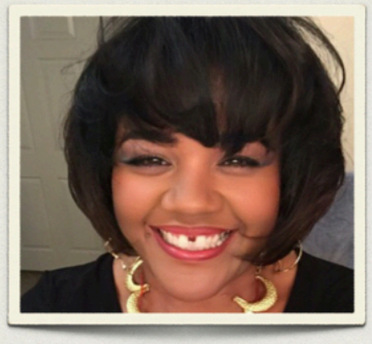
Saturday, December 12, 2020
10:30 am to 11:00 am (PST)

Problem Break
and
Solution Share



Donna M. Smith

Professor of Mathematics
Sierra College

Saturday, December 12, 2020
11:00 am to 12:00 pm (PST)

Microwaves, Peaks, Valleys, and a Deck of Cards

You're invited to join Donna as she describes how Top Hat allowed her to traverse microwave ovens in trigonometry, peaks and valleys in college algebra, and a deck of cards in statistics' most powerful theorem. Top Hat is the complex, dynamic yet simple platform that allowed her to engage students online in a way never thought possible. The web-based software has given her the opportunity to integrate questions, videos, PowerPoints, discussion questions and websites such as Desmos, PhET and Wolfram Alpha all in one place. She was able to develop "the ask" that empowers students and unleashes their potential by using the breakout groups with video chats and file sharing, Socratic methods that instantly assess student comprehension and compel participation while connecting with her students because of the ease in grading their work and responding with feedback

Ying Lin

Mathematics Instructor
Santa Rosa Junior College

Saturday, December 12, 2020
11:00 am to 12:00 pm (PST)

Mathematical Modeling for Community College Curriculum: Examples from the Covid-19 Pandemic

The overwhelming global media coverage of, as well as the intense research interest in the Covid-19 pandemic has provided many useful examples of mathematical modeling related to the community college mathematics curriculum. This talk reviews some areas where real-life events and research findings may be connected to our classes, as well as suggests some problems or projects for students to explore. Emphasis will be placed on ideas for teaching differential equations and statistics.

Guillermo Alvarez

Professor of Mathematics
Cuesta College

Saturday, December 12, 2020
11:00 am to 12:00 pm (PST)

Teaching Statistics and Distance Education: In search of significant learning

This lecture introduces a pedagogy for Distance Education and a collection of materials for the teaching and learning of Statistics. A large proportion of those methodology and materials are ready to be used in the platform Standard Statistics, at www.standardstatistics.com. This lecture also teaches how to take advantage of the platform

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12:00 pm to 12:30 pm (PST)

Lunch Break
and
Special Wine Pairing

2020 CMC³ Virtual Fall Mathematics Conference

Saturday, December 12, 2020
12:30 pm to 1:00 pm (PST)

Awards
and
Recognitions

Dr. Brittany Mosby

Director of HBCU Success

Tennessee Higher Education Commission

Saturday, December 12, 2020
1:00 pm to 2:00 pm (PST)

Teaching to Transgress: Mathematics as a Tool for Social Justice

Building on the work of liberation pedagogy (Paolo Freire, bell hooks), this presentation will encourage faculty to view the mathematics classroom as a launchpad for the success of underrepresented and minoritized students, rather than the barrier/gatekeeper it has traditionally been. In particular, we will discuss the importance of connecting mathematics to not just "real world" applications, but also meaningful, interdisciplinary problems that more accurately reflect the reality of 21st century citizens, and problems that value and celebrate, rather than minimize and silence, individual students' identities and community connections. Example projects that incorporate social justice for first year mathematics students will also be shared.

Saturday Keynote Speaker

2020 CMC³ Virtual Fall Mathematics Conference

Saturday, December 12, 2020
2:00 pm to 2:15 pm (PST)

Conference Closing
and
Thank You