

MMATYC Spring 2015 Conference

We put the 'M' in STEM!

Friday, May 29, 2015
Frederick Community College
Student Center / H Building

9:00 – 2:00 Vendor Displays

8:30 – 9:30 Registration and Breakfast

9:30 – 10:30 Breakout Session 1

H204 1A. *Bringing Math to Life with Desmos Graphing Calculator*
Steven Fairgrieve, Allegany College of Maryland

Graphing Calculators are great, right? Using them to enrich instruction though can often be painful in the best of times. GC emulators can help some. But the graphs are still just as bland. Desmos allows us to not only graph in vibrant colors it also enables us to teach through demonstrating graphs. Examples, strategies and techniques for using Desmos (which is free) will be presented.

H205 1B. *An Accelerated Intermediate Algebra Repeat Course at CCBC*
Neeraj Sharma, The Community College of Baltimore County

Come and learn about a course designed with the concentration on resolving students' individual deficiencies to accelerate completion of the development sequence. This course is designed utilizing the open resources to reduce any financial burden on students. The presenter will discuss the effectiveness and challenges involved in implementing this course.

H206 1C. *Bringing Statistics to Life*
Erum Marfani, Frederick Community College

This interactive presentation will show the audience how students can set-up a hypothesis testing project. Students collect their own data via a survey and complete the calculations on their own. Different examples will be given, culminating in the audience setting up their own examples and calculations.

10:30 – 11:30 Welcome and Keynote Address (Cafeteria)

SMP in CCs!

Judy Werner, Associate Professor of Math Education, Slippery Rock University

With the introduction of the Common Core in 2010, many ideas and concepts were introduced for PK-12 mathematics. A major component is the part defining Standards for Mathematical Practice (SMP). What is SMP? Are we doing it already, but didn't really know it? Does it help students understand the mathematics they do?

12:00 – 1:00 Lunch (Cafeteria)

12:20 – 1:00 MMATYC Business Meeting (during lunch in cafeteria)

Dan Fahringer, AMATYC Mid-Atlantic Vice President

Evan Evans, MMATYC President

1:00 – 1:50 Breakout Session 2

H204 2A. *Computer Visualizations for College-Level Mathematics*

Robert Kuhar, Community College of Baltimore County - Dundalk

Elaine Jadacki, Baltimore City Community College.

Various math software will be demonstrated to provide a visual on topics such as quadratic functions, complex roots of quadratics, transformations, difference quotient & limits, central limit theorem, t-distribution & normal distribution, completing the square, trigonometric functions, and more.

H205 2B. *Writing an Open-Source Liberal-Arts Math Textbook*

Josiah Hartley and Larry Huff, Frederick Community College

Open Educational Resources (OER) are gaining ground as a free alternative to the rising costs that college students endure. Come hear about an exciting project at FCC: the creation of a new open-source textbook for liberal-arts students, including videos, interactive links, and a full online homework component, all for free.

H206 2C. *The Derivative in Your Hands*

Mike Long and Loretta Tokoly, Howard Community College

A follow up to take it to last year's Take It To The Limit, participants will engage in hands-on and technology assisted tasks to further students conceptual understanding of the derivative.

H208 2D. *Developmental Mathematics Roundtable*

Kylena Cross, Frederick Community College

Are you interested in Developmental Mathematics? Want to share or hear what your colleagues are doing to improve Developmental Math programs across the state? Come to the Developmental Mathematics Roundtable! We will share information on our respective programs, discuss completion initiatives, explore new ideas and just plain have a good time!

2:00 – 2:50 Breakout Session 3

**H204 3A. *Air-travel Itinerary Shares: Relevant Factors and Competition Dynamics*
Greg Coldren, Frederick Community College**

This presentation will show how models from the field of Discrete Choice Analysis are used for itinerary-level passenger forecasting in the commercial aviation industry. Several models will be highlighted emphasizing factors that influence passenger itinerary choice, as well as underlying competition dynamics existing among itineraries.

**H205 3B. *Implementation of Open Educational Resources in an Online Developmental Mathematics Course*
Neeraj Sharma and Christine Mirbaha, The Community College of Baltimore County**

With the student success as the ultimate goal, pressure is on faculty to create/locate resources that are accessible and cost-efficient. This presentation focuses on the creation and implementation of the quality matters certified Intermediate Algebra course which successfully integrates the open educational resources to promote effective online learning experience.

**H206 3C. *Building the Concept of Function with Pre-Service Teachers*
Carol Howald, Howard Community College**

Beginning with physical models, a sequence of investigations are shared, which allow students to explore functions through multiple representations. The different representations proposed provide opportunities for concept building and allows access to mathematics for a variety of learners and for assessment of many types of reasoning.

See you next year!