



48th Annual Meeting Historic Boone Tavern Berea, KY Friday, February 25th & Saturday, February 26th, 2022 All times are local time (Eastern Time)

A special thanks to our Corporate Sponsors







Forty-Eighth Annual Meeting of KYMATYC

Conference Agenda

Friday, February 25th, 2022

All times are local time (Eastern Time)

12:00 - ?? PM Registration

1:00 - 1:50 Concurrent Session #1

Event Center

Presenter: Kausha Miller – Bluegrass CTC Presider: Jeff Herrin – Bluegrass CTC Student Success Initiatives at BCTC

A brief overview of various Student Success Initiatives occurring at Bluegrass CTC and then an opportunity to hear what's happening at other institutions. Bring descriptions, data or just some highlights from your own schools to share!

Coyle Gathering Room

Presenter: Brandon Bartley – Jefferson CTC
Presider: Brandon Bartley – Jefferson CTC
Technology That Helped Me Survive Covid

We all had to adapt due to Covid, especially in course delivery methods and use of technology. In this session I will demonstrate how I used different devices (Wacom pen-pad, Wacom tablet, touch screen, etc.) initially to hold entirely virtual classes but now apply to all of my courses regardless of mode of delivery. There will be time at the end of the session for anyone that wants to try the devices I bring with me. Hand sanitizer will be provided!

Skylight Room

Presenter: David Williamson – Pearson Presider: Brandon Elmes – Jefferson CTC

Quality and Insights in Higher Education (Corporate Partner Presentation)

2:00 - 2:50 Concurrent Session #2

Event Center

Presenter: Jon Oaks - Macomb Community College

Presider: Jeff Herrin – Bluegrass CTC
Techniques for Self-Regulated Learning

In this presentation, the presenter will share techniques he has used in his computer-based, lecture, and online classes to help promote self-regulated learning in his students. These techniques include requiring students to take a specific path to complete the course material, as well as mastery-based quizzing.

Coyle Gathering Room

Presenter: Kathryn Schaefer – Hawkes Learning Presider: Angela Huddleston – Bluegrass CTC

Elements for Successful Courses in the Digital Age (Corporate Partner Presentation)

With an increasing mix of online, hybrid & in-person course offerings, students are learning differently than ever before. As a result, they require a unique set of resources that not only meet their general course needs but also give them the necessary support to thrive in the array of new learning environments that they may encounter. Join us as we break down the nine elements that instructors can implement to help meet students' needs in modern classroom setups. We will explore how factors such as equity, scalability and engagement play a role in supporting students as they learn, ensuring positive outcomes in any course structure. Learn new ways to connect with your students, facilitate active participation, prioritize accessibility, and more. Attend and be entered to win one of three \$25 Amazon Gift Cards!

Skylight Room

Presenter: Brandon Elmes – Jefferson CTC Presider: Brandon Elmes – Jefferson CTC

OneNote for Hybrid or Online Courses

The session will show participants how to sync OneNote to your LMS to provide a spot for students to submit work for hybrid or online courses. You can create a Collaboration Space for all students to use as well as individual student notebooks where they can submit written work for Quizzes, Tests, Activities, etc. OneNote can also be used as a virtual whiteboard for delivering lectures.

3:00-3:30 Break Visit Exhibitor's Tables and enjoy snacks and refreshments courtesy of Pearson!



Concurrent Session #3 3:30-4:20

Event Center

Presenter: Charles Warburton – Gateway CTC Presider: Angela Huddleston – Bluegrass CTC

Passion Driven Statistics

In this session the presenter will share information about the NSF founded project Passion Driven Statistics (PDS). Passion Driven Statistics looks to transform the Introductory Level Statistics class from lecture based into a project-based course. Participants will leave with the presentation with resources for those looking to explore the PDS model. Additionally, participants will learn about future paid professional development opportunities for faculty looking into implementing PDS into their classrooms.

Coyle Gathering Room

3:30-3:55

Presenter: Sherry McCormack – Hopkinsville CC Presider: Sherry McCormack – Hopkinsville CC

Technology Tools and Tricks

Learn how to make your online content more professional (and fun) by creating and adding thumbnail images to YouTube videos, add creative images to Blackboard messages, make memes and gifs, use Demos, and other fun tools.

Presenter: Jeff Herrin – Bluegrass CTC Presider: Jeff Herrin – Bluegrass CTC

BCTC's Math Blackboard Ultra UberShell

BCTC Mathematics and Statistics division created a generic Blackboard Ultra shell that was used for our class coordinator shells. Come see how we organized modules and sections, including instruction pages and room for individual instructors to add individualized videos or documents. We can share the export file if you bring a USB drive.

Skylight Room

Presenter: Pamela Connors – Bluegrass CTC Presider: Brandon Bartley – Jefferson CTC

BCTC's Spotlight Instruction Series: A year in review

In the spring of 2021, BCTC launched a pilot for a new student success initiative, the Spotlight Instruction Series (SIS). Find out what SIS is, its structure, and see examples of session activities. After a year of implementation, hear what we have learned, and where we are going.

4:20 - 4:30Small Break Visit Exhibitor's Tables.

4:30 - 4:45KYMATYC WELCOME - Door Prizes in the Coyle Gathering Room shortly before Keynote.

4:45 - 5:45 **Keynote Address.**

Coyle Gathering Room

Presenter: Luke Walsh – Catawba Valley Community College

Presider: Jeff Herrin – Bluegrass CTC

Over or Under: How do you divide?

There exists a wide range of notations and words to represent division. How does our choice of symbols and language impact people in understanding the actions centered around this operation? Let's chat about when are we embracing and when we are avoiding the uses of division that occur within and outside the community of mathematics.

Luke Walsh graduated from Indiana University in 2000 and then began teaching 8th grade mathematics in North Carolina. After five years in the public education system, he took a break to hike the Appalachian Trail. In 2007, Luke earned a master's in mathematics from Appalachian State University, and since then he has been a full-time mathematics instructor at Catawba Valley Community College (CVCC). Luke loves to collaborate with other teachers, to eat BBQ and drink craft beer, to create graphs on Desmos, to spend time outdoors, and to go on family road trips.

6:00 Dinner Event Center (Prior Purchase Required)

Cash bar available

7:00 Ignite Session Event Center

Presider: Pat Riley, Hopkinsville Community College

Check out the ignite session. Those who did not want to present a full session but have an idea or issue they wish to share and session presenters have the opportunity to summarize their presentations. They have exactly 5 minutes in a fast paced, whirlwind, idea sharing session. This session will last as long as there are presenters.

Immediately following Ignite – ?? "After Math" Reception - Event Center

Come join us for light and lively conversation, food and drinks. Play some games, catch-up with friends, and network with colleagues and vendors.

Saturday, February 26th, 2022

All times are local time (Eastern Time)

7:00 AM Breakfast Event Center (Prior purchase required)

8:00 – ?? **Registration**

8:30 – 9:20 Concurrent Session #4

Event Center

8:30-8:55

Presenter: Eileen Walter – Gateway CTC Presider: Sherry McCormack – Hopkinsville CC

How will I ever teach this??? MAT 205/206: Overcoming Student Fears

Students so often are terrified by the idea of becoming an elementary school teacher and being expected to teach their students concepts that they are uncomfortable with themselves. I want to share ideas that make the students think outside their own bubble to empower them to be successful in the classroom. While MAT 205 and MAT 206 are not methods classes, they allow us the opportunity to not only teach the material in the course objectives but encourage the students to see a way to teach the material and make it something that evokes positive results in your classroom and theirs.

9:05-10:20

Presenter: Drew Wilkerson – Jefferson CTC Presider: Sherry McCormack – Hopkinsville CC

Lights, Camera, Math! (note: overlaps with Concurrent Session #5)

Hobbits, elves, and wizards with the one ring. Journeys through space to explore new worlds. Velociraptors fighting T-Rex. We all love the magic of movies, but it really must be magic, because the science and math don't add up. In this session, we take a critical look at plots and scenes from some of Hollywood's biggest hits. What seems farfetched becomes even more so when you look at the real math and science behind it.

Coyle Gathering Room

Presenter: Audrey Brock – Bluegrass CTC Presider: Brandon Elmes – Jefferson CTC

Multidisciplinary Involvement in a Google Computer Science Education Research Grant

In this presentation I'll talk about a Google Computer Science Education Research (CS-ER) grant that BCTC received for the current school year. Our grant is called, "What Under-Represented Minority and Female High School Students Know (and Don't Know) about Computer Science Careers." My goal is to share the cool work we're doing, potentially inspire you to apply for a Google CS-ER or other grant, highlight the benefits of involving faculty from multiple disciplines, and discuss the administrative logistics that go on behind the scenes of a grant.

Concurrent Session #4 continued next page

8:30 – 9:20 Concurrent Session #4 (continued)

Presenter: Hunter Chandler – Bluegrass CTC Presider: Brandon Bartley – Jefferson CTC

Building Student Engagement with Desmos across Course Modalities

Have you seen a decline in student engagement? Are you tired of talking to a blank space in your online course meetings? Desmos Teacher may be a solution for you! Desmos is more than a free graphing or scientific calculator—Desmos technology has grown into a student engagement platform! In this workshop, you will discover the potential of Desmos Teacher on student engagement through an interactive lesson. Bring your laptops to follow along and learn how to incorporate Desmos Teacher into your teaching. We will explore how to create a free account, how to access starter slides, how to build slides, how to incorporate assessments, and briefly cover Demos' Computation Layer as a scripting language.

9:30 – 10:20 Concurrent Session #5

Event Center (Continued from 9:05)

Presenter: Drew Wilkerson – Jefferson CTC Presider: Sherry McCormack – Hopkinsville CC

Lights, Camera, Math!

Hobbits, elves, and wizards with the one ring. Journeys through space to explore new worlds. Velociraptors fighting T-Rex. We all love the magic of movies, but it really must be magic, because the science and math don't add up. In this session, we take a critical look at plots and scenes from some of Hollywood's biggest hits. What seems farfetched becomes even more so when you look at the real math and science behind it.

Coyle Gathering Room

Presenter: Jennifer Ackerman – Jefferson CTC Presider: Angela Huddleston – Bluegrass CTC

Exploring Alternative Assessments

Assessing student understanding can leave you with more questions than answers. Come explore some ideas and resources for developing alternative assessments. Share what you've been doing and discuss the benefits and challenges you've encountered along the way.

Skylight Room

Presenter: Scott McClendon – Somerset CC Presider: Brandon Bartley – Jefferson CTC

Content Creation with Open Broadcast Software

Join for a discussion about creating media content for class or demonstration using a popular free app called OBS. Open Broadcast Software (OBS) is a free open-source software for video recording and live streaming. It's known for being able to create simple screen recordings or sophisticated videos by capturing multiple sources at once such as window captures, images, text, browser windows, webcams, capture cards, and more. It can also create a virtual camera for use in online meeting apps like Zoom, Teams and Blackboard Collaborate.

10:20 - 10:45 Checkout/Break

10:45 - 11:35 Concurrent Session #6

Event Center

Presenter: Pat Riley – Hopkinsville CC Presider: Brandon Elmes – Jefferson CTC Analyzing the Fire Drill from The Office

One of the iconic scenes from the TV show "The Office" centers around a fake fire drill. This talk will use Newton's Law of Heating/Cooling to analyze the timeline and math behind the door handle heating portion of the drill. Participants will be asked to work together to collect information and then make calculation estimates to determine the feasibility of the plan.

Concurrent Session #6 continued next page

10:45 - 11:35 Concurrent Session #6 (continued)

Coyle Gathering Room

Presenter: Dwight Smith – Big Sandy CTC

Presider: Jeff Herrin - Bluegrass CTC

Polynomial Equations; or Fun with Academic Politics

One of the most famous problems in the history of mathematics is solving polynomial equations. We all know about the Quadratic Formula. There is a Cubic Formula, which has a discriminant like the Quadratic Equation does, describing the nature of its roots. It turns out that there is a Quartic Formula for solving fourth-degree polynomials! It was eventually proven that there is no general formula for higher-degree polynomial equations. In this talk, I will discuss these topics and the fascinating human interest stories they involve. And academic politics, which we all know and love, played an amusing part!

Skylight Room

Presenter: Angela Huddleston – Bluegrass CTC Presider: Angela Huddleston – Bluegrass CTC

Creating Custom Banners for Ultra Course Shells

Want to add color and character to your course shell? Using banners as headers in your course creates an organized course for students to have a better experience following your directions. This session will cover easy ways to create ADA compliant custom banner images to personalize your Blackboard Ultra course shell.

11:45-12:00 Break/Snacks Enjoy some snack food and conversation in the Event Center!

12:00 **Business Meeting Event Center**

Notes:

Kentucky Mathematical Association of Two-Year Colleges Executive Board 2020-2022

Jeff Herrin President

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