



Mathematics Teacher Professional Development Workshop

September 30, 2023

Offered by the Cornell University Department of Mathematics as part of MATH 4980/5080, together with the NYS Master Teacher Program & the Teacher Center of Central Westchester

AGENDA

9:00 – 9:15 am **Welcome & Overview**

9:15 – 10:15 am **Using Magic to Teach Mathematics**
Eric Bill (Union-Endicott High School)

Mathematics concepts underlie many magic tricks and can be used to hook students at various grade levels who are learning new content. In this session, participants will learn a handful of these tricks and how they can be used to teach content such as algebraic modeling, divisibility rules, converting between binary and decimal representations, modular arithmetic, geometry, and probability.

10:20 am – 11:50 pm **Amping Mathematics Instruction to Maximize Engaging Students' Interest and Success Utilizing Artificial Intelligence (AI)**
Mark Marino (Department of Mathematics, SUNY-Buffalo)

Artificial Intelligence is the cutting-edge tool for current dynamic mathematics instruction. In this session I will provide innovative techniques for incorporating AI into mathematics lessons and assessments.

11:50 – 12:20 pm **Break & Discussion**

12:20 – 12:50 pm **Birds-of-a-Feather Session**

Break-out rooms will be available for same grade / same class discussions.

12:50 – 1:20 pm **CTLE Credits**
Toni Gamils (Teacher Center of Central Westchester)

Toni will answer all of your questions – from basic to advanced – regarding CTLE credits!

1:20 – 2:20 pm **Engaging Students in the Math Classroom with the Question Formulation Technique**
Toni Gamils (Teacher Center of Central Westchester)

Learn how to introduce the Question Formulation Technique into your instruction to drive deeper conceptual understanding, foster an equitable learning environment, develop students' growth mindset toward mathematics, and inspire a sense of student ownership in the classroom.

Modality	Credit	Cost	Registration & More Information
virtual	5½ CTLE hours or Master Teacher credit	free, unless seeking Cornell University credit	https://e.math.cornell.edu/classes/math5080/ Mary Ann Huntley (huntley@math.cornell.edu)