## CCSU DEPARTMENT OF MATHEMATICAL SCIENCES

## VIRTUAL COLLOQUIUM

Friday, April 30 3:00 – 4:00 PM

https://ccsu.webex.com/meet/gotchev

## MATH 421: HISTORY OF MATHEMATICS STUDENT PRESENTATIONS

**Abstract:** Over this spring 2021 semester students in Math 421 have studied and presented about a diverse group of mathematicians from historical, biographical, and mathematical perspectives. The goal of the course was to have students explore the cultural connections of the time in which certain mathematics was developed. In particular, students were to learn about the non-European roots of mathematics. The traditional mathematicians studied included Newton, Diophantus, Gauss, Fibonacci, Euclid, Eratosthenes, Archimedes, and Fermat. Students were introduced to the mathematics of the Ishango bone, Egyptian hieroglyphics, Babylonian Cuneiform (base 60), fractions written in base 60, Mayan bars & dots, Egyptian doubling, Egyptian unit fractions and the life and mathematics of Ethnomathematician Dr. Gloria Gilmer. Guest speakers presented a variety of topics including using Vieté's Theorem to prove the Quadratic formula, applications of Coordinate Geometry, Descartes Rule of Signs, Lusona sand drawings, and Egyptian math.

To end the semester, students will present a variety of topics at the colloquium:

- 1. Rony Urtecho will address the historical background of Andean Mathematics Mathematics of the Inca Empire (XIV - XV). He will focus on the Peruvian Quipu, a counting device made of knotted cords, its physical features, summation capabilities, and its socio-economic impact in the Inca Empire.
- II. Partners Mia Lenois and Melissa Valletta will present about Liu Hui and his square root extraction method.
- III. Michelino Gali will present about the life and mathematics of Sophie Germain. He will present Fermat's Last Theorem.

For further information: <u>gotchevi@ccsu.edu</u> 860-832-2839 http://www.math.ccsu.edu/gotchev/colloquium/