Cornell University

K-12 Education and Outreach, Mathematics Department

MATH 5080 – Mathematics for Secondary School Teachers

October 1, 2016 ◆ 9:00 am – 2:30 pm (lunch provided) ◆ 4

♦ 406 Malott Hall

8:45 – 9:00 am Bagels & Juice (provided)

9:00 – 9:15 am Introductions

9:15 – 12:15 pm Using Graphing Calculator Technology to Teach Mathematics and Science

This hands-on workshop will address graphing calculator features on the Casio PRIZM, which enables students to develop conceptual understanding and algebraic thinking by connecting mathematical representations. Content will focus on inquiry-based pedagogical techniques aligned to the NYS Regents Exams in mathematics and the CCSS-M, as well as connections to the Next Generation Science Standards. The purpose of this session is to promote awareness of technology options available. Attendees will receive prizes (i.e., calculators, bags, t-shirts) through random drawings.

Speakers: Ed Monk & Tom Beatini (Casio)

12:15 – 1:00 pm Lunch (provided)

1:00 – 2:30 pm Mathematics as a Creative Enterprise

Mathematics is similar to other academic disciplines in that success at an advanced level requires a high level of creativity. But mathematics differs from at least some other disciplines, including STEM disciplines, in that creativity often is not highly rewarded at the lower and intermediate levels. In this session, we will explore ways in which to encourage creative thinking in math. I will discuss (a) what creativity is, (b) what the thinking skills and attitudes are that lead to creativity, and (c) examples of the kinds of problems my colleagues and I have given students to assess creative thinking in the mathematical domain. Audience members will be actively involved in the presentation to reflect on ways to develop creative thinking in the context of their own classrooms.

Speaker: Robert Sternberg (Cornell University)

RSVP by Wednesday, September 21, 2016

Registration Form: https://www.math.cornell.edu/m/Community/5080#form

Questions? Contact Mary Ann Huntley (huntley@math.cornell.edu)