

Math Machines 2014 Workshop: “Connecting Math, Science and Technology”

5-Day Institute: August 4-8, 2014 (Monday through Friday, 8:00 – 4:00)

One-Day Follow-Up will be scheduled for a Saturday in Fall

Sinclair Community College – Dayton, OH

Teachers of mathematics, science and technology are invited to receive and learn to use 3 *Math Machines*: a “Function Plane,” an “RGB Color Mixer” and a “Programmable Vehicle.” Each of these machines can be operated with either a Windows computer or a TI graphing calculator.



In addition to the hardware, participants will receive all necessary software and a collection of classroom activities which apply mathematics (especially algebra) to achieve specific physical tasks. All classroom materials are provided in Word format, and workshop participants will have the opportunity to modify the activities for their math, science or technology classes. For additional information about the hardware, software and classroom materials, see www.mathmachines.net.

Who Should Participate?

Applicants should be secondary school or introductory college teachers of Science, Technology, Engineering or Mathematics (STEM) who want to incorporate authentic, real-world activities in their classrooms. Teams of teachers who can continue to collaborate during the school year are particularly encouraged. **No prior experience with programming or electronics is required!** Computer-controlled Math Machines are programmed using Excel-like mathematical functions; calculator-controlled Math Machines are programmed using standard calculator functions.

What Do Participants Provide?

Participants should bring a Windows laptop computer (XP or later) or a TI-83/84 calculator or both. Participants using a computer will need “administrative privileges” on the computer so they can install all necessary software. Calculator users should bring a TI-83 or TI-84 calculator (any type) which they can continue to use in their classroom.

What Is the Cost?

Thanks to support from the **Ohio Honor Project**, [faculty teaching in Ohio can participate without charge](#). If space is available, teachers outside Ohio can participate at a cost of \$500. Travel, lodging and meals (including lunch) are the responsibility of participants or their school.

Can I Earn Credit for the Workshop?

Participants have the option of receiving 3 semester hours of graduate credit through Ashland University at the reduced cost of \$525 (\$175 /credit hour). A representative of Ashland University will be present during the workshop to process course registration and tuition payment.

Workshop Facilitators:

Fred Thomas, Physical Science, Learning with Math Machines
Robert Chaney, Mathematics, Sinclair Community College



For additional information, contact:

Dr. Fred Thomas
Email: fred.thomas@mathmachines.net

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Name: _____

School: _____ Position: _____

School Address: _____

City, State & Zipcode _____

Home Address: _____

City, State & Zipcode _____

School Phone: _____ Home Phone: _____

School E-mail: _____ Home E-mail: _____

If you are applying as part of a team, list the names of the other team members below.
(Each individual must submit a separate application form.)

What is your primary teaching area? Mathematics Science Technology

Other (Please specify) _____

How long have you been teaching in this area?

What subjects and levels do you teach regularly?

In what ways do you expect that you and your students will benefit from this workshop?

(Continued on reverse)

If you want, describe an aspect of your background, your expertise, your personality or anything else that would help you in contributing to the success of this workshop.

Selection of participants will begin immediately and continue as long as space is available.

Mail, fax or email the completed application to:

Learning with Math Machines
1014 Merrywood Drive
Englewood, Ohio 45322

Voice phone: 947-832-0792
Fax: 614-455-0856
Email: fred.thomas@mathmachines.net
Web: www.mathmachines.net

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in cooperation with **Sinclair Community College**

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