

# Mathematics Professional Opportunities in Ohio, open to all – 2015-2016

## Introductory GeoGebra/GeoGebraTube Workshop

June 6-7 Hamilton County ESC



*Is your school moving towards 1-to-1 with Chrome Books or iPads?  
Are you looking for a FREE math software solution that can be used on these devices?  
Are you looking for a FREE math software solution that can be used in grades 5-12?*

Then you should join us June 6 and 7 at the Hamilton County ESC for an Introductory GeoGebra/GeoGebraTube Workshop. GeoGebra is *THE* browser-based graphing calculator for Geometry, Algebra, Calculus, Statistics and 3D Math! GeoGebra ([www.geogebra.org](http://www.geogebra.org)) is FREE dynamic mathematics software for all levels of mathematics that brings together geometry, algebra, spreadsheets, graphing, statistics and calculus in one easy-to-use package.

**Register at**

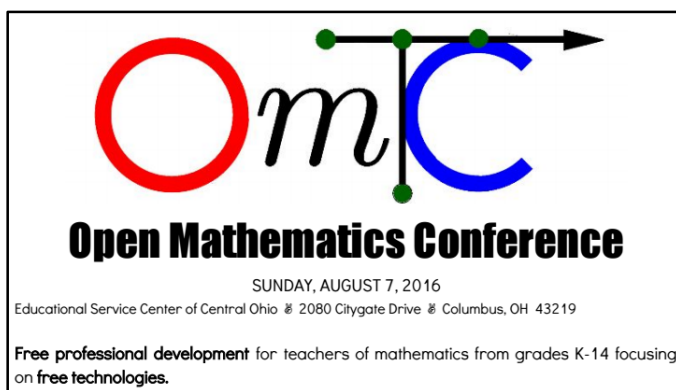
[https://www.escweb.net/oh\\_hcesc/catalog/session.aspx?session\\_id=37815](https://www.escweb.net/oh_hcesc/catalog/session.aspx?session_id=37815)

**Questions?**

**Contact Christina Sherman ([christina.sherman@hcesc.org](mailto:christina.sherman@hcesc.org)) or Steve Phelps ([sphelps@madeiracityschools.org](mailto:sphelps@madeiracityschools.org))**

**Click [here](#) to view a flyer that details other PD opportunities offered by the Hamilton County ESC this summer.**

## Open Mathematics Conference



Date: Sunday, August 7, 2016 (The day after MathFest!)  
Location: Educational Service Center of Central Ohio  
2080 Citygate Drive  
Columbus, OH 43219  
Register at: <https://openmathconference2016.eventbrite.com>  
Contact: Todd Edwards [m.todd.edwards@gmail.com](mailto:m.todd.edwards@gmail.com) or  
Steve Phelps [sphelps31415@gmail.com](mailto:sphelps31415@gmail.com)

## Ongoing opportunities (or including multiple dates)

### Cincinnati Math Teacher's Circles

Saturday May 7 @ Loveland HS

You can keep up on things at <http://cincymathcircle.wikispaces.com/>  
or at <https://www.facebook.com/cincymathcircle>

### SouthEast Ohio Math Teachers' Circle (<http://seomtc.weebly.com/>)

All are welcome at all meetings. The next SEOMTC meeting date is Saturday, May 7, 2016 from 9am-12pm. To be part of the SEOMTC mailing list, please email Ryan Davis at [ryan.davis@southernlocal.net](mailto:ryan.davis@southernlocal.net)

## Extended Summer 2016 PD Opportunities

# SouthEast Ohio Math Teacher's Circle Summer Immersion

Dates: June 6-9, 2016

Location: Athens, Ohio

Register at: [Please click here](#). Space is limited, so sign up now!



Modspar is offering two in-depth professional development programs during summer 2016:

## [Modeling with Algebra](#) **June 19–24 and August 1–2**

Explores the general proportional model, discrete dynamical systems, and modeling with functions. [Read more](#).

## [Modeling with Geometry](#) **July 10–15 and August 1–2**

Investigates geometric transformations, coordinate systems, and three-dimensional and spherical geometry. [Read more](#).

Both programs are designed to help teachers improve their content knowledge and instruction in mathematical modeling with the goal of improving student achievement and college readiness. All Ohio Grade 9–12 teachers are welcome, including special education teachers and intervention specialists. Sessions are led by Ohio University faculty and by master teachers who have successfully navigated many of the daily challenges you face.

Modspar is funded by an Improving Teacher Quality grant administered by the Ohio Department of Higher Education. Program participants receive STIPENDS and materials, plus FREE meals and on-campus housing for those who live more than 45 miles away. Graduate credit (4 semester hours) for each program is available at a reduced cost of \$600, a \$1,732 savings! Additional online sessions and follow-up workshops are included.

**Click [here](#) to register**, or click the institute names above to visit the web pages.

# Friday Institute at NC State Offering Free Online Course

**What:** Massive Open Online Course for Educators (MOOC-ED) that is focused on "Teaching Statistics Through Data Investigations". The course is designed to develop the pedagogy and content understanding for teachers in middle school, high school, and AP/ intro college levels.

**When:** The course will open June 6th and will then remain open and available until August 29th. This way, you can come in and engage with materials as you can and are available. This also means that if you started the course previously and did not get a chance to finish, you can dive right in where you left off!

**Cost:** Registration is FREE and there is an opportunity for teachers to earn a Certificate of Completion (which can be submitted for CEUs) for either 20 hours if they complete all activities in the course or for 25 hrs if they also do a project.

You can see a more detailed description of the course here:

<http://friday.institute/tsdi>

## CONNECTED MATH TRAINING (CMP3)

**When:** Monday, August 1 - Thursday, August 4, 8:30-4:30 each day

**Who:** Math teachers in grades 5-8 are welcome, as well as others interested in learning more about CMP. CMP3 has been written to accommodate Common Core and is available to the public this summer. Teachers new to CMP, teachers who have used CMP2, and teachers who are adopting CMP3 will benefit from this professional development.

**Cost:** \$250 per participant. One semester of graduate credit through Wright State University is available for an additional \$250

**Contact:** Dr. Brian Boyd, Mathematics Education, Wright State University  
[brian.boyd@wright.edu](mailto:brian.boyd@wright.edu), 937-775- 3275

Click [here](#) to view a flyer that has additional details about this PD.

## Fraction Boot Camp

**What:** Probably the most important shift in mathematics happens in grades 3-6 with fractions. We start by looking at Ohio's Learning Standards, which introduce fractions in grades 1 and 2 through geometry. From there we move to the basic conceptual understandings of what fractions are in grades 3 and 4. The use of the Standards for Mathematical Practice along with the Cognitive Demands will be front and center to our learning. By the end of day 2, we will begin building our conceptual knowledge of operations in fractions. The progressions tell us what to focus on – visual models such as number lines, geoboards, patty paper, etc.

This workshop will be offered at two different locations during different times of the year.

1. **Where:** Huber Heights City Schools, Weisenborn PLTW Lab  
**When:** July 26, 27, and 28 (all three days)  
**Cost:** \$150

Click [here](#) to view the flyer for this event.

2. **Where:** Drake County ESC  
**When:** September 20, October 18, and November 1st (all three days)  
**Cost:** \$150 (Free for Drake County teachers)

Click [here](#) to view the flyer for this event.

## Northeast Ohio Crooked River Math Teachers' Circle Immersion Workshop

**What:** A Math Teachers' Circle (MTC) is a professional community of teachers and mathematicians that meet regularly to work on rich mathematics problems. Immersion workshops last 2 to 4 days, are filled with solving a variety of rich problems, and build a strong sense of community amongst the participants.

**When:** June 28-30, 2016

**Where:** Cuyahoga County ESC

**To register:** Go to [www.esc-cc.org](http://www.esc-cc.org). Select Professional Development/ Calendar of Events.

Space is limited, so sign up now!

Click [here](#) to view a flyer for this event.

# Summer Math Workshops Sponsored by Educational Service Center of Cuyahoga County, NEOMS, GCCTM, and Ashland University

Don't miss this dynamic opportunity to learn with Northeast Ohio's distinguished mathematics instructional leaders! With nine powerful, inspiring sessions to choose from, these workshops offer an affordable, convenience way to keep current with effective mathematics pedagogy and deepen understanding of content and practices. What a great way to earn continuing education contact hours while networking and planning ahead for next school year. Register by May 30 to reserve your spot! Each session is limited to a maximum of 30 Participants.

**To register:** Go to [www.esc-cc.org](http://www.esc-cc.org). Select Professional Development/ Calendar of Events. Click on the event and follow the prompts to complete registration.

Click [here](#) for additional information.

# PD/Course Offerings for Summer 2016

## The University of Akron

<a href="#">Fractions, Functions, Rates, and Ratios: The Path to Algebra Success</a> (click link for more details)	A workshop for teachers and teacher-teams from Grades 6-10, including Intervention Specialists, examining teaching strategies for improving algebra achievement in middle and high school	June 6 to 10 and June 13 to 16
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## Bowling Green State University

<a href="#">Math 6280</a> (click link for more details)	Teaching and Learning Calculus	It meets at 4:30-6:05 Monday to Thursday from May 16 to June 24
<a href="#">Math 6820</a> (click link for more details)	Inequalities	It meets from June 27 to August 5, from 2:45 to 4:20 Monday to Thursday

You do not need to be part of a degree program to take classes. See this page <https://www.bgsu.edu/regISTRATION-RECORDS/admission-services/graduate-graduate-non-degree.html> about being a graduate non-degree-seeking student. There is no application fee. You can later apply to enroll in a master's program and can "transfer" up to 9 credit hours taken as a guest student into the degree program (to the extent that it applies toward the degree). For this, there is an application fee.

## The University of Cincinnati

<a href="#">Math 7071</a> (click link for more details)	Algebra and Number Theory I	Summer 2016
<a href="#">Math 7072</a> (click link for more details)	Algebra and Number Theory II	Summer 2016
<a href="#">Math 7073</a> (click link for more details)	Probability and Statistical Inference	Summer 2016
<a href="#">Math 7074</a> (click link for more details)	Technology for Statistics	Summer 2016

These are courses for the MAT program and for those working towards CCP.

## Cleveland State University

MTH 593 Special Topics: Advanced Functions and Modeling	9:55am-Noon MTWTh	June 25 – August 5, 2016
MTH 547 Calculus from an Advanced Viewpoint	12:30-2:35 MTWTh	June 25 – August 5, 2016

The Dept. of Mathematics at CSU is offering two summer classes that might be of interest to mathematics teachers. They will be held at the Cuyahoga Education Services Center in Independence. Both classes will run from June 25 – August 5, 2016. For more information contact John Holcomb at [j.p.holcomb@csuohio.edu](mailto:j.p.holcomb@csuohio.edu)

## John Carroll University

<a href="#">MT 509 - GREAT MOMENTS IN MATHEMATICS</a> (click link for more details)	3.000 Credit hours	June 20-July 14
<a href="#">MT 512 - TECHNOLOGY IN TEACHING MATH</a> (click link for more details)	3.000 Credit hours	June 20-July 14
<a href="#">MT 503 - MODERN GEOMETRY</a> (click link for more details)	3.000 Credit hours	July 18-August 11
<a href="#">MT 502 - DISCRETE MATHEMATICS</a> (click link for more details)	3.000 Credit hours	July 18-August 11

These courses are part of a Master of Arts Degree for high school teachers but can also be used to earn credits towards College Credit Plus “certification.” More information can be found at [jcu.edu/graduatestudies](http://jcu.edu/graduatestudies) .

## Kent State University

<a href="#">Problem-Based Learning: An Interactive and Engaging Student-Centered Learning Environment</a> (click link for more details)	2 undergraduate credit hours, \$912 CI 40093, CRN # 14597 2 graduate credit hours, \$990 CI 50093, CRN # 14598	Online from June 6 to July 1
<a href="#">Mobile Technologies for Educators</a> (click link for more details)	1 undergraduate credit hour, \$456 ITEC 40093, CRN # 14593 1 graduate credit hour, \$495	Online from July 4 to July 15



	ITEC 50093, CRN # 14594	
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**Lake Erie College**

ED 5704 Internet Resources for Teaching Math Common Core State Standards	1 SH, \$230
ED 5707 Common Core in Mathematics: Instructional Shifts for Effective Implementation, Grades K-2 Syllabus: <a href="http://www1.kdsi.org/100134/pdf/syllabi/SYLLCCMK23GKDS.pdf">http://www1.kdsi.org/100134/pdf/syllabi/SYLLCCMK23GKDS.pdf</a>	3 SH, \$515
ED 5708 Common Core in Mathematics: Instructional Shifts for Effective Implementation, Grades 3-5 Syllabus: <a href="http://www1.kdsi.org/100134/pdf/syllabi/SYLLCCM353GKDS.pdf">http://www1.kdsi.org/100134/pdf/syllabi/SYLLCCM353GKDS.pdf</a>	SH, \$515
ED 5709 Common Core in Mathematics: Instructional Shifts for Effective Implementation, Grades 6-8 Syllabus: <a href="http://www1.kdsi.org/100134/pdf/syllabi/SYLLCCM683GKDS.pdf">http://www1.kdsi.org/100134/pdf/syllabi/SYLLCCM683GKDS.pdf</a>	3 SH, \$515
ED 5710 Common Core in Mathematics: Instructional Shifts for Effective Implementation, Grades 9-12 Syllabus: <a href="http://www1.kdsi.org/100134/pdf/syllabi/SYLLCCM9123GKDS.pdf">http://www1.kdsi.org/100134/pdf/syllabi/SYLLCCM9123GKDS.pdf</a>	3 SH, \$515
In addition we are offering graduate credit for a conference that takes place at Exeter Academy in New Hampshire. ED 7001, Phillips Exeter Anja S. Greer Conference on Mathematics and Technology.	3 SH, \$500

**Ohio Dominican University**

<a href="#">EDU 535</a> (click link for more details)	Developing a Deeper Understanding of Leadership	Online from June 6 to July 29 or on ODU's campus during the week of June 13 from 8:30 to 3:30
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Ohio Dominican University will offer the Teacher Leader Endorsement, a 3-course sequence, beginning Summer, 2016. This is the first course in that sequence.

**The Ohio State University**

<a href="#">T&amp;L 7715</a> (click link for more details)	Learning Progressions in Mathematics Education	June 8 to August 1
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