


SECONDARY MATHEMATICS PDP CATALOG 2009 - 2010

The  starburst indicates a course held during the Summer Conference.

Please refer to the Summer Conference Booklet for more information.



VIRGINIA BEACH CITY PUBLIC SCHOOLS

A H E A D O F T H E C U R V E

2009 - 2010
MANDATORY PDP SESSSIONS
SECONDARY MATHEMATICS

Audience	Session Title	PDP Hours	Dates Offered
High School Mathematics Teachers and High School Special Education Teachers assigned to Algebra, Functions, and Data Analysis classes during the 2009-2010 school year	Algebra, Functions, and Data Analysis Textbook Implementation	3	June 22, 2009
High School Mathematics Teachers and High School Special Education Teachers assigned to Algebra, Functions, and Data Analysis classes during the 2009-2010 school year	Algebra, Functions, and Data Analysis Textbook Implementation	0	September 1, 2009
Grade 6 and Advanced Mathematics 6 Teachers and Special Education Teachers assigned to grade 6 and advanced mathematics 6 classes who have never attended this training	Implementing Everyday Mathematics 6	3	June 22, 2009
Grade 6 and Advanced Mathematics 6 Teachers and Special Education Teachers assigned to grade 6 and advanced mathematics 6 classes who have never attended this training	Implementing Everyday Mathematics 6	0	September 1, 2009
High School Mathematics Teachers assigned to AP Computer Science A classes during the 2009-2010 school year	Textbook Implementation—Java Software Solutions for AP Computer Science/Pearson	3	June 24, 2009
High School Mathematics Teachers assigned to AP Computer Science A classes during the 2009-2010 school year	Textbook Implementation—Java Software Solutions for AP Computer Science/Pearson	0	September 1, 2009
High School Mathematics Teachers assigned to AP Statistics classes during the 2009-2010 school year	Textbook Implementation—Statistics in Action: Understanding a World of Data/Key Curriculum Press	3	June 24, 2009
High School Mathematics Teachers assigned to AP Statistics classes during the 2009-2010 school year	Textbook Implementation—Statistics in Action: Understanding a World of Data/Key Curriculum Press	0	September 1, 2009

Secondary Mathematics

AP Calculus Forum PDP

Teachers will discuss, plan, and share activities and strategies for student success in AP Calculus.

Eligible Audience: High School AP Calculus Teachers



P-MATH-0359-09-001

June 24, 2009

8:00 AM - 11:00 AM

Wednesday

Landstown HS - Room 127

Instructor: Hebert, Christine

3 License Renewal Points/3 PDP Hours

AP Statistics Forum PDP

Teachers will discuss past test performance, collaborate on appropriate instructional plans, and share activities and strategies that engage students and promote achievement in AP Statistics.

Specific dates and times are as follows:

Thur., Sept. 17, 2009 - 3:00 - 4:30 PM

Thur., Nov. 12, 2009 - 3:00 - 4:30 PM

Thur., Jan. 14, 2010 - 3:00 - 4:30 PM

Thur., Mar. 11, 2010 - 3:00 - 4:30 PM

Thur., Apr. 15, 2010 - 3:00 - 4:00 PM

Eligible Audience: High School Advanced Placement Statistics Teachers

P-MATH-0368-09-001

September 16, 2009 - April 15, 2010

3:00 PM - 4:30 PM

Wednesday, Thursday

Salem HS, 123

Instructor: Harrison, Mary O

7 License Renewal Points/7 PDP Hours

AP Computer Science Forum PDP

Teachers will discuss, plan, and share activities and strategies for student success in AP Computer Science. Please note specific dates and times.

Tues., Sept. 22, 2009 - 3:00 - 4:30 PM

Tues., Nov. 17, 2009 - 3:00 - 4:30 PM

Tues., Jan. 19, 2010 - 3:00 - 4:30 PM

Tues., Mar. 16, 2010 - 3:00 - 4:30 PM

Tues., Apr. 20, 2010 - 3:00 - 4:00 PM

Eligible Audience: High School AP Computer Science Teachers

P-MATH-0434-09-001

September 22, 2009 - April 20, 2010

3:00 PM - 4:30 PM

Tuesday

Princess Anne HS, 326

Instructor: Harrison, John E

7 License Renewal Points/7 PDP Hours

Cooperative Learning in Middle School Mathematics Courses PDP

This course will help teachers incorporate cooperative learning strategies into their own instructional practice. It is designed to offer specific techniques to increase student engagement and learning.

Eligible Audience: Middle School Mathematics Teachers and Middle School Special Education Teachers

P-MATH-0440-09-001

October 20, 2009

4:30 PM - 6:30 PM

Tuesday

Great Neck MS, Portable 10

Instructor: Abbott, Amy L

2 License Renewal Points/2 PDP Hours

P-MATH-0440-09-002

October 21, 2009

4:30 PM - 6:30 PM

Wednesday

6700 Neck MS, Portable 10

Instructor: Abbott, Amy L

2 License Renewal Points/2 PDP Hours

P-MATH-0440-09-003

October 28, 2009

4:30 PM - 6:30 PM

Wednesday

Princess Anne MS, 314

Instructor: Abrams, Donna/Buddenhagen,
Danni

2 License Renewal Points/2 PDP Hours

**Cooperative Learning in High School
Mathematics Courses PDP**

This course will help teachers incorporate cooperative learning strategies into their own instructional practice. It is designed to offer specific techniques to increase student engagement and learning.

Eligible Audience: High School Mathematics Teachers and High School Special Education Teachers



P-MATH-0441-09-001

June 22, 2009

12:00 PM - 3:00 PM

Monday

Landstown HS - Room 404

Instructor: Nelson, Nancy S

3 License Renewal Points/3 PDP Hours

**Implementing Everyday Mathematics in
Grade 6 (Mandatory) PDP**

This session is mandatory for Mathematics 6 and Advanced Mathematics 6 teachers who are implementing Grade 6 Everyday Mathematics and have not attended this training. Program philosophy, organization, assessment, and implementation will be presented.

Eligible Audience: Grade 6 and Advanced Mathematics 6 Teachers and Special Education Teachers assigned to grade 6 and advanced mathematics 6 classes who have never attended this training



P-MATH-0495-09-001

June 22, 2009

12:00 PM - 3:00 PM

Monday

Landstown HS - Room 400

Instructor: Minor, Beth

3 License Renewal Points/3 PDP Hours

P-MATH-0495-09-002

September 01, 2009

8:30 AM - 11:30 AM

Tuesday

Advanced Technology Center, H131

Instructor: Everyday Math Instructors

3 License Renewal Points/0 PDP Hours

Algebra I Teacher Forum - Meeting 1
PDP

This professional development forum is designed to provide collaboration opportunities for Algebra I teachers. Participants will work together to share ideas, resources, and instructional strategies in order to support instructional practice and to foster increased student learning. This meeting will focus on first quarter topics and strategies to assist struggling learners.

Eligible Audience: Algebra I Teachers and Special Education Teachers assigned to Algebra I classes

P-MATH-0624-09-001

October 07, 2009

4:30 PM - 6:30 PM

Wednesday

Landstown MS, C8

Instructor: Bateman, Charleene G

2 License Renewal Points/2 PDP Hours

Algebra I Teacher Forum - Meeting 2
PDP

This professional development forum is designed to provide collaboration opportunities for Algebra I teachers. Participants will work together to share ideas, resources, and instructional strategies in order to support instructional practice and to foster increased student learning. This meeting will focus on second quarter topics and strategies to assist struggling learners.

Eligible Audience: Algebra I Teachers and Special Education Teachers assigned to Algebra I classes

P-MATH-0625-09-001

December 09, 2009

4:30 PM - 6:30 PM

Wednesday

Landstown MS, C8

Instructor: Bateman, Charleene G

2 License Renewal Points/2 PDP Hours

Algebra I Teacher Forum - Meeting 3
PDP

This professional development forum is designed to provide collaboration opportunities for Algebra I teachers. Participants will work together to share ideas, resources, and instructional strategies in order to support instructional practice and to foster increased student learning. This meeting will focus on third quarter topics and strategies to assist struggling learners.

Eligible Audience: Algebra I Teachers and Special Education Teachers assigned to Algebra I classes

P-MATH-0626-09-001

February 10, 2010

4:30 PM - 6:30 PM

Wednesday

Landstown MS, C8

Instructor: Bateman, Charleene G

2 License Renewal Points/2 PDP Hours

Algebra I Teacher Forum - Meeting 4
PDP

This professional development forum is designed to provide collaboration opportunities for Algebra I teachers. Participants will work together to share ideas, resources, and instructional strategies in order to support instructional practice and to foster increased student learning. This meeting will focus on fourth quarter topics and strategies to assist struggling learners.

Eligible Audience: Algebra I Teachers and Special Education Teachers assigned to Algebra I classes

P-MATH-0627-09-001

April 14, 2010

4:30 PM - 6:30 PM

Wednesday

Landstown MS, C8

Instructor: Bateman, Charleene G

2 License Renewal Points/2 PDP Hours

Algebra II Teacher Forum - Meeting 1

PDP

This professional development forum is designed to provide collaboration opportunities for Algebra II and Algebra II/Trig teachers. Participants will work together to share ideas, resources, and instructional strategies in order to support instructional practice and to foster increased student learning. This meeting will focus on first quarter topics and strategies to assist struggling learners.

Eligible Audience: Algebra II Teachers and Algebra II/Trigonometry Teachers

P-MATH-0629-09-001

August 12, 2009

9:00 AM - 11:00 AM

Wednesday

Princess Anne HS, 304

Instructor: Rhodes, Patricia W

2 License Renewal Points/2 PDP Hours

Algebra II Teacher Forum - Meeting 2

PDP

This professional development forum is designed to provide collaboration opportunities for Algebra II and Algebra II/Trig teachers. Participants will work together to share ideas, resources, and instructional strategies in order to support instructional practice and to foster increased student learning. This meeting will focus on second quarter topics and strategies to assist struggling learners.

Eligible Audience: Algebra II Teachers and Algebra II/Trigonometry Teachers

P-MATH-0630-09-001

October 14, 2009

3:00 PM - 5:00 PM

Wednesday

Princess Anne HS, 304

Instructor: Rhodes, Patricia W

2 License Renewal Points/2 PDP Hours

Algebra II Teacher Forum - Meeting 3

PDP

This professional development forum is designed to provide collaboration opportunities for Algebra II and Algebra II/Trig teachers. Participants will work together to share ideas, resources, and instructional strategies in order to support instructional practice and to foster increased student learning. This meeting will focus on third quarter topics and strategies to assist struggling learners.

Eligible Audience: Algebra II Teachers and Algebra II/Trigonometry Teachers

P-MATH-0631-09-001

December 02, 2009

3:00 PM - 5:00 PM

Wednesday

Princess Anne HS, 304

Instructor: Rhodes, Patricia W

2 License Renewal Points/2 PDP Hours

Algebra II Teacher Forum - Meeting 4

PDP

This professional development forum is designed to provide collaboration opportunities for Algebra II and Algebra II/Trig teachers. Participants will work together to share ideas, resources, and instructional strategies in order to support instructional practice and to foster increased student learning. This meeting will focus on fourth quarter topics and strategies to assist struggling learners.

Eligible Audience: Algebra II Teachers and Algebra II/Trigonometry Teachers

P-MATH-0632-09-001

March 10, 2010

3:00 PM - 5:00 PM

Wednesday

Princess Anne HS, 304

Instructor: Rhodes, Patricia W

2 License Renewal Points/2 PDP Hours

Geometer's Sketchpad - Algebra I PDP

This class will provide teachers with an opportunity to experience how Sketchpad can be integrated into the teaching and the learning of mathematics. This session will review each drawing tool and will provide lesson activities that are specifically designed for Algebra I topics.

Eligible Audience: Secondary Mathematics Teachers Who Teach Algebra I and Special Education Teachers



P-MATH-0638-09-001

June 23, 2009

8:00 AM - 11:00 AM

Tuesday

Landstown HS - Room 226

Instructor: Cujardo Jr, Pedro E

3 License Renewal Points/3 PDP Hours

Geometer's Sketchpad - Geometry PDP

This class will provide teachers with an opportunity to experience how Sketchpad can be integrated into the teaching and the learning of mathematics. This session will review each drawing tool and will provide lesson activities that are specifically designed for Geometry topics.

Eligible Audience: Secondary Mathematics Teachers and Secondary Special Education Teachers



P-MATH-0639-09-001

June 22, 2009

12:00 PM - 3:00 PM

Monday

Landstown HS - Room 223

Instructor: Baker, Dorothy P

3 License Renewal Points/3 PDP Hours

Geometry Teacher Forum - Meeting 1 PDP

This professional development forum is designed to provide collaboration opportunities for Geometry teachers. Participants will work together to share ideas, resources, and instructional strategies in order to support instructional practice and to foster increased student learning. This meeting will focus on first quarter topics and strategies to assist struggling learners.

Eligible Audience: Geometry Teachers and Special Education Teachers assigned to Geometry classes

P-MATH-0642-09-001

September 22, 2009

4:30 PM - 6:30 PM

Tuesday

Independence MS, 419

Instructor: Tennant, Cheryl A

2 License Renewal Points/2 PDP Hours

Geometry Teacher Forum - Meeting 2 PDP

This professional development forum is designed to provide collaboration opportunities for Geometry teachers. Participants will work together to share ideas, resources, and instructional strategies in order to support instructional practice and to foster increased student learning. This meeting will focus on second quarter topics and strategies to assist struggling learners.

Eligible Audience: Geometry Teachers and Special Education Teachers assigned to Geometry classes

P-MATH-0643-09-001

November 4, 2009

4:30 PM - 6:30 PM

Wednesday

Independence MS, 419

Instructor: Tennant, Cheryl A

2 License Renewal Points/2 PDP Hours

Geometry Teacher Forum - Meeting 3
PDP

This professional development forum is designed to provide collaboration opportunities for Geometry teachers. Participants will work together to share ideas, resources, and instructional strategies in order to support instructional practice and to foster increased student learning. This meeting will focus on third quarter topics and strategies to assist struggling learners.

Eligible Audience: Geometry Teachers and Special Education Teachers assigned to Geometry classes

P-MATH-0644-09-001

January 19, 2010

4:30 PM - 6:30 PM

Tuesday

Independence MS, 419

Instructor: Tennant, Cheryl A

2 License Renewal Points/2 PDP Hours

Geometry Teacher Forum - Meeting 4
PDP

This professional development forum is designed to provide collaboration opportunities for Geometry teachers. Participants will work together to share ideas, resources, and instructional strategies in order to support instructional practice and to foster increased student learning. This meeting will focus on fourth quarter topics and strategies to assist struggling learners.

Eligible Audience: Geometry Teachers and Special Education Teachers assigned to Geometry classes

P-MATH-0645-09-001

March 23, 2010

4:30 PM - 6:30 PM

Tuesday

Independence MS, 419

Instructor: Tennant, Cheryl A

2 License Renewal Points/2 PDP Hours

Instructional Practice - Communicating
Mathematical Understanding PDP

As one of the NCTM Process Standards, communication is an essential part of mathematics and mathematics education. Students must be able to communicate their mathematical thinking coherently and clearly to peers, teachers, and others for it is through this process that students organize and solidify their own understanding. This class will address strategies that use reading, writing, and speaking skills to increase student learning.

Session dates: October 13, 2009 and December 8, 2009

Eligible Audience: Secondary Mathematics Teachers and Secondary Special Education Teachers assigned to mathematics classes

P-MATH-0646-09-001

October 13 - December 8, 2009

4:30 PM - 6:30 PM

Tuesday

Plaza MS, 124

Instructor: Price, Deborah/Patterson, Tracy

4 License Renewal Points/4 PDP Hours

Using the TI-Navigator Learning System to Increase Student Engagement and Learning PDP

This course is designed to help teachers learn about the TI-Navigator as an effective tool to increase student engagement and learning. Sessions will include:

- Setting up the TI-Navigator and establishing class rosters
- Using the LearningCheck App to electronically send and receive data sets, quizzes, etc., to students
- Using Screen Capture and Quick Poll Navigator features to enhance classroom learning
- Using the TI-Navigator to transfer calculator files from the teacher's computer to all connected student calculators
- Using the LearningCheck Creator software to design documents to send to students through the TI-Navigator system
- Using the TI-Navigator as a tool for formative assessment
- Using appropriate pedagogy to implement the TI-Navigator system

Eligible Audience: Middle and High School Mathematics Teachers

P-MATH-0666-09-001

September 29, 2009 - April 22, 2010

Times Vary

Days Vary

Various Locations

Instructor: Various Instructors

8 License Renewal Points/8 PDP Hours

Grade 6 Mathematics Forum - Meeting 1 PDP

Teachers will discuss, plan, and share activities and strategies for student success in the Grade 6 mathematics classroom. This meeting will focus on first quarter topics and strategies to assist struggling learners.

Eligible Audience: Mathematics 6 Teachers, Advanced Mathematics 6 Teachers, and Special Education Teachers assigned to Mathematics 6

P-MATH-0669-09-001

October 1, 2009

4:30 PM - 6:30 PM

Thursday

Salem MS, 101

Instructor: Paxton, Charleen A

2 License Renewal Points/2 PDP Hours

Grade 6 Mathematics Forum - Meeting 2 PDP

Teachers will discuss, plan, and share activities and strategies for student success in the Grade 6 mathematics classroom. This meeting will focus on second quarter topics and strategies to assist struggling learners.

Eligible Audience: Mathematics 6 Teachers, Advanced Mathematics 6 Teachers, and Special Education Teachers assigned to Mathematics 6

P-MATH-0670-09-001

December 02, 2009

4:30 PM - 6:30 PM

Wednesday

Salem MS, 101

Instructor: Paxton, Charleen A

2 License Renewal Points/2 PDP Hours

Grade 6 Mathematics Forum - Meeting 3
PDP

Teachers will discuss, plan, and share activities and strategies for student success in the Grade 6 mathematics classroom. This meeting will focus on third quarter topics and strategies to assist struggling learners.

Eligible Audience: Mathematics 6 Teachers, Advanced Mathematics 6 Teachers, and Special Education Teachers assigned to Mathematics 6

P-MATH-0671-09-001

February 03, 2010

4:30 PM - 6:30 PM

Wednesday

Salem MS, 101

Instructor: Paxton, Charleen A

2 License Renewal Points/2 PDP Hours

Grade 6 Mathematics Forum - Meeting 4
PDP

Teachers will discuss, plan, and share activities and strategies for student success in the Grade 6 mathematics classroom. This meeting will focus on fourth quarter topics and strategies to assist struggling learners.

Eligible Audience: Mathematics 6 Teachers, Advanced Mathematics 6 Teachers, and Special Education Teachers assigned to Mathematics 6

P-MATH-0672-09-001

April 14, 2010

4:30 PM - 6:30 PM

Wednesday

Salem MS, 101

Instructor: Paxton, Charleen A

2 License Renewal Points/2 PDP Hours

Grade 7 Mathematics Forum - Meeting 1
PDP

Teachers will discuss, plan, and share activities and strategies for student success in the Grade 7 mathematics classroom. This meeting will focus on first quarter topics and strategies to assist struggling learners.

Eligible Audience: Mathematics 7 Teachers, Advanced Mathematics 7 Teachers, and Special Education Teachers assigned to Mathematics 7

P-MATH-0673-09-001

October 08, 2009

4:30 PM - 6:30 PM

Thursday

Kempsville MS, 120

Instructor: Leigh, Victoria S

2 License Renewal Points/2 PDP Hours

Grade 7 Mathematics Forum - Meeting 2
PDP

Teachers will discuss, plan, and share activities and strategies for student success in the Grade 7 mathematics classroom. This meeting will focus on second quarter topics and strategies to assist struggling learners.

Eligible Audience: Mathematics 7 Teachers, Advanced Mathematics 7 Teachers, and Special Education Teachers assigned to Mathematics 7

P-MATH-0674-09-001

December 03, 2009

4:30 PM - 6:30 PM

Thursday

Kempsville MS, 120

Instructor: Leigh, Victoria S

2 License Renewal Points/2 PDP Hours

Grade 7 Mathematics Forum - Meeting 3
PDP

Teachers will discuss, plan, and share activities and strategies for student success in the Grade 7 mathematics classroom. This meeting will focus on third quarter topics and strategies to assist struggling learners.

Eligible Audience: Mathematics 7 Teachers, Advanced Mathematics 7 Teachers, and Special Education Teachers assigned to Mathematics 7

P-MATH-0675-09-001

February 04, 2010

4:30 PM - 6:30 PM

Thursday

Kempsville MS, 120

Instructor: Leigh, Victoria S

2 License Renewal Points/2 PDP Hours

Grade 7 Mathematics Forum - Meeting 4
PDP

Teachers will discuss, plan, and share activities and strategies for student success in the Grade 7 mathematics classroom. This meeting will focus on fourth quarter topics and strategies to assist struggling learners.

Eligible Audience: Mathematics 7 Teachers, Advanced Mathematics 7 Teachers, and Special Education Teachers assigned to Mathematics 7

P-MATH-0676-09-001

April 15, 2010

4:30 PM - 6:30 PM

Thursday

Kempsville MS, 120

Instructor: Leigh, Victoria S

2 License Renewal Points/2 PDP Hours

Grade 8 Mathematics Forum - Meeting 1
PDP

Teachers will discuss, plan, and share activities and strategies for student success in the Grade 8 mathematics classroom. This meeting will focus on first quarter topics and strategies to assist struggling learners.

Eligible Audience: Mathematics 8 Teachers and Special Education Teachers assigned to Mathematics 8

P-MATH-0677-09-001

October 08, 2009

4:30 PM - 6:30 PM

Thursday

Larkspur MS, C-15

Instructor: Delaune, John

2 License Renewal Points/2 PDP Hours

Grade 8 Mathematics Forum - Meeting 2
PDP

Teachers will discuss, plan, and share activities and strategies for student success in the Grade 8 mathematics classroom. This meeting will focus on second quarter topics and strategies to assist struggling learners.

Eligible Audience: Mathematics 8 Teachers and Special Education Teachers assigned to Mathematics 8

P-MATH-0678-09-001

December 10, 2009

4:30 PM - 6:30 PM

Thursday

Larkspur MS, C-15

Instructor: Delaune, John

2 License Renewal Points/2 PDP Hours

Grade 8 Mathematics Forum - Meeting 3
PDP

Teachers will discuss, plan, and share activities and strategies for student success in the Grade 8 mathematics classroom. This meeting will focus on third quarter topics and strategies to assist struggling learners.

Eligible Audience: Mathematics 8 Teachers and Special Education Teachers assigned to Mathematics 8

P-MATH-0679-09-001

February 11, 2010

4:30 PM - 6:30 PM

Thursday

Larkspur MS, C-15

Instructor: Delaune, John

2 License Renewal Points/2 PDP Hours

Grade 8 Mathematics Forum - Meeting 4
PDP

Teachers will discuss, plan, and share activities and strategies for student success in the Grade 8 mathematics classroom. This meeting will focus on fourth quarter topics and strategies to assist struggling learners.

Eligible Audience: Mathematics 8 Teachers and Special Education Teachers assigned to Mathematics 8

P-MATH-0680-09-001

April 22, 2010

4:30 PM - 6:30 PM

Thursday

Larkspur MS, C-15

Instructor: Delaune, John

2 License Renewal Points/2 PDP Hours

Math Analysis Forum - Meeting 1 PDP

Teachers will discuss, plan, and share activities and strategies for student success in the Mathematical Analysis classroom. This meeting will focus on first quarter topics and strategies to assist struggling learners.

Eligible Audience: Mathematical Analysis Teachers

P-MATH-0682-09-001

September 16, 2009

3:00 PM - 5:00 PM

Wednesday

Princess Anne HS, 309

Instructor: Carlson, Tammy R

2 License Renewal Points/2 PDP Hours

Math Analysis Forum - Meeting 2 PDP

Teachers will discuss, plan, and share activities and strategies for student success in the Mathematical Analysis classroom. This meeting will focus on second quarter topics and strategies to assist struggling learners.

Eligible Audience: Mathematical Analysis Teachers

P-MATH-0683-09-001

November 18, 2009

3:00 PM - 5:00 PM

Wednesday

Princess Anne HS, 309

Instructor: Carlson, Tammy R

2 License Renewal Points/2 PDP Hours

Math Analysis Forum - Meeting 3 PDP

Teachers will discuss, plan, and share activities and strategies for student success in the Mathematical Analysis classroom. This meeting will focus on third quarter topics and strategies to assist struggling learners.

Eligible Audience: Mathematical Analysis Teachers

P-MATH-0684-09-001

February 03, 2010

3:00 PM - 5:00 PM

Wednesday

Princess Anne HS, 309

Instructor: Carlson, Tammy R

2 License Renewal Points/2 PDP Hours

Math Analysis Forum - Meeting 4 PDP

Teachers will discuss, plan, and share activities and strategies for student success in the Mathematical Analysis classroom. This meeting will focus on fourth quarter topics and strategies to assist struggling learners.

Eligible Audience: Mathematical Analysis Teachers

P-MATH-0685-09-001

April 14, 2010

3:00 PM - 5:00 PM

Wednesday

Princess Anne HS, 309

Instructor: Carlson, Tammy R

2 License Renewal Points/2 PDP Hours

TI-User Group--Meeting 1 PDP

Planning for First Semester. In this TI-User Group session, the use of TI technology will be used to enhance the mathematics curriculum. First semester topics will be discussed. Please bring an activity that uses TI technology to share or bring an activity for us to turn into a TI activity. The focus will be on the understanding and implementation of the TI-Navigator classroom learning system as well as TI-Nspire and TI-Nspire CAS technology.

Eligible Audience: Middle and High School Mathematics Teachers; Teacher Leadership Cadre Members from 2007-2008 and 2008-2009 are encouraged to attend

P-MATH-0716-09-001

September 24, 2009

4:30 PM - 6:30 PM

Thursday

Cox HS, 123

Instructor: Pugliese, E/Edwards, C

2 License Renewal Points/2 PDP Hours

TI-User Group--Meeting 2 PDP

Teacher Leadership Cadre Gathering. Teachers will discuss, plan, and share activities and strategies for student success using the TI-Navigator classroom learning system in the mathematics classroom. The use of other TI software will also be discussed. Please bring an activity to share.

Eligible Audience: Middle and High School Mathematics Teachers who participated in the Teacher Leadership Cadre in 2007-2008 and 2008-2009

P-MATH-0717-09-001

October 22, 2009

4:30 PM - 6:30 PM

Thursday

Princess Anne HS, 305

Instructor: Timmerman, V/Edwards, C

2 License Renewal Points/2 PDP Hours

TI-User Group--Meeting 3 PDP

Activity Center & Learning Check. In this session, participants will learn more about creating the TI-Navigator components, Activity Center and Learning Check. Ready-to-use review materials will be shared, and participants will learn to create their own. Please bring an activity that uses TI technology to share or bring an activity for us to turn into a TI activity. The focus will be on the understanding and implementation of the TI-Navigator classroom learning system as well as TI-Nspire and TI-Nspire CAS technology.

Eligible Audience: Middle and High School Mathematics Teachers; Teacher Leadership Cadre Members from 2007-2008 and 2008-2009 are encouraged to attend

P-MATH-0718-09-001

November 19, 2009

4:30 PM - 6:30 PM

Thursday

Cox HS, 123

Instructor: Pugliese, E/Timmerman V

2 License Renewal Points/2 PDP Hours

TI-User Group--Meeting 4 PDP

Teacher Leadership Cadre Gathering. Teachers will discuss, plan, and share activities and strategies for student success using the TI-Navigator classroom learning system in the mathematics classroom. The use of other TI software will also be discussed. Please bring an activity to share.

Eligible Audience: Middle and High School Mathematics Teachers who participated in the Teacher Leadership Cadre from 2007-2008 and 2008-2009

P-MATH-0719-09-001

January 07, 2010

4:30 PM - 6:30 PM

Thursday

Princess Anne HS, 305

Instructor: Timmerman, V/Edwards, C

2 License Renewal Points/2 PDP Hours

TI-User Group--Meeting 5 PDP

Planning for Second Semester. In this TI-User Group session, the use of TI technology will be used to enhance the mathematics curriculum. Second semester topics will be discussed. Please bring an activity that uses TI technology to share or bring an activity for us to turn into a TI activity. The focus will be on the understanding and implementation of the TI-Navigator classroom learning system as well as TI-Nspire and TI-Nspire CAS technology.

Eligible Audience: Middle and High School Mathematics Teachers; Teacher Leadership Cadre Members in 2007-2008 and 2008-2009 are encouraged to attend

P-MATH-0720-09-001

February 18, 2010

4:30 PM - 6:30 PM

Thursday

Cox HS, 123

Instructor: Pugliese, E/Edwards, C

2 License Renewal Points/2 PDP Hours

TI-User Group--Meeting 6 PDP

Preparing for the SOLs. In this TI-User Group session, the use of TI technology to prepare for the SOLs will be discussed. Ready-to-use review materials will be shared. Participants will learn to create their own. The focus will be on the understanding and implementation of the TI-Navigator classroom learning system as well as TI-Nspire and TI-Nspire CAS technology.

Eligible Audience: Middle and High School Mathematics Teachers; Teacher Leadership Cadre Members from 2007-2008 and 2008-2009 are encouraged to attend

P-MATH-0721-09-001

March 11, 2010

4:30 PM - 6:30 PM

Thursday

Cox HS, 123

Instructor: Pugliese, E/Timmerman V

2 License Renewal Points/2 PDP Hours

TI-User Group--Meeting 7 PDP

Teacher Leadership Cadre Gathering. Teachers will discuss, plan, and share activities and strategies for student success using the TI-Navigator classroom learning system in the mathematics classroom. The use of other TI software will also be discussed. Please bring an activity to share.

Eligible Audience: Middle and High School Mathematics Teachers who participated in the Teacher Leadership Cadre in 2007-2008 and 2008-2009

P-MATH-0722-09-001

April 15, 2010

4:30 PM - 6:30 PM

Thursday

Princess Anne HS, 305

Instructor: Timmerman, V/Edwards, C

2 License Renewal Points/2 PDP Hours

Introduction to the TI-Nspire PDP

This course will introduce teachers to the basic functions of the TI-Nspire handheld device as an instructional method to promote interactive learning with students. Teachers will learn about the basic screen functions of the device and how it can be adapted in a secondary mathematics classroom.

Eligible Audience: High School Mathematics Teachers who Teach Algebra or Higher Math Classes



P-MATH-0733-09-001

June 23, 2009

8:00 AM - 11:00 AM

Tuesday

Landstown HS - Room 302

Instructor: Hook/Mazzacane

3 License Renewal Points/3 PDP Hours

P-MATH-0733-09-002

September 26, 2009

8:30 AM - 3:30 PM

Saturday

Advanced Technology Center - Room H131

Instructor: Hook, Ellen

7 License Renewal Points/7 PDP Hours

P-MATH-0733-09-003

September 26, 2009

8:30 AM - 3:30 PM

Saturday

Advanced Technology Center - Forum

Instructor: Texas Instruments Consultant

7 License Renewal Points/7 PDP Hours

21st Century Resources for Millennial Learners: Best Practices Using NASA eClips From Real World: Mathematics PDP

Learn how to engage 21st century learners through the use of NASA eClips from Real World: Mathematics designed for middle school students. NASA eClips are short, relevant educational video segments designed to inspire and motivate students, while exploring science, technology, engineering, and mathematics (STEM) concepts. Real World: Mathematics helps students see real-world mathematics connections using NASA technologies.

This presentation focuses on integrating NASA eClips content into standards-based curriculum using the 5E Learning Model. Differentiated instruction and best practice in the use of educational technology is emphasized throughout this training.

Participants may earn an additional 1 PDP point by implementing NASA eClips into their instruction. Feedback will be documented through an online form and electronic discussion forum.

Eligible Audience: Middle School Mathematics Teachers



P-MATH-0773-09-001

June 24, 2009

9:00 AM - 11:00 AM

Wednesday

Landstown HS - Room 227

Instructor: Jarramillo, Rebecca

2 License Renewal Points/2 PDP Hours

Addressing the SOL Standards in Grade 7 Mathematics PDP

This session will review content and SOL objectives for grade 7 mathematics teachers. Topics will include pedagogy and methodology for teaching Grade 7 Mathematics.

Eligible Audience: Grade 7 Mathematics Teachers and Grade 7 Special Education Teachers assigned to mathematics classes



P-MATH-0774-09-001

June 24, 2009

8:00 AM - 11:00 AM

Wednesday

Landstown HS - Room 224

Instructor: Dupont, John W

3 License Renewal Points/3 PDP Hours

Algebra I Content Review for Special Education Teachers PDP

This session will review content and SOL objectives for Algebra I, Introduction to Algebra, and Algebra IX special education teachers. Topics will include pedagogy and methodology for teaching algebra.

Eligible Audience: Secondary Special Education Teachers



P-MATH-0775-09-001

June 22, 2009

8:00 AM - 11:00 AM

Monday

Landstown HS - Room 404

Instructor: Nelson, Nancy S

3 License Renewal Points/3 PDP Hours

**Algebra, Functions, and Data Analysis
Course and Textbook Implementation
(Mandatory) PDP**

This session is mandatory for secondary teachers who are implementing the new Algebra, Functions, and Data Analysis course during the 2009-2010 school year. Program philosophy, organization, assessment, and implementation will be presented. Teachers will receive their teacher editions during this session.

Eligible Audience: High School Mathematics Teachers and High School Special Education Teachers assigned to Algebra, Functions, and Data Analysis classes during the 2009-2010 school year



P-MATH-0776-09-001

June 22, 2009

8:00 AM - 11:00 AM

Monday

Landstown HS - Room 408

Instructor: Consultant(s) and Porter, Judy

3 License Renewal Points/3 PDP Hours

P-MATH-0776-09-002

September 01, 2009

12:30 PM - 3:30 PM

Tuesday

Advanced Technology Center, H131

Instructor: Consultant(s)

3 License Renewal Points/0 PDP Hours

**Algebra, Functions, and Data Analysis
Teacher Forum - Meeting 1 PDP**

This professional development forum is designed to provide collaboration opportunities for teachers of the new course, Algebra, Functions, and Data Analysis. Participants will work together to share ideas, resources, and instructional strategies in order to support instructional practice and to foster increased student learning. This meeting will focus on first quarter topics and strategies to assist struggling learners.

Eligible Audience: Algebra, Functions, and Data Analysis Teachers and Special Education Teachers assigned to Algebra, Functions, and Data Analysis classes

P-MATH-0777-09-001

October 01, 2009

3:00 PM - 5:00 PM

Thursday

First Colonial HS - Room 602

Instructor: Nastelli, Kathy M.

2 License Renewal Points/2 PDP Hours

Algebra, Functions, and Data Analysis
Teacher Forum - Meeting 2 PDP

This professional development forum is designed to provide collaboration opportunities for teachers of the new course, Algebra, Functions, and Data Analysis. Participants will work together to share ideas, resources, and instructional strategies in order to support instructional practice and to foster increased student learning. This meeting will focus on second quarter topics and strategies to assist struggling learners.

Eligible Audience: Algebra, Functions, and Data Analysis Teachers and Special Education Teachers assigned to Algebra, Functions, and Data Analysis classes

P-MATH-0778-09-001

December 03, 2009

3:00 PM - 5:00 PM

Thursday

First Colonial HS - Room 602

Instructor: Nastelli, Kathy M.

2 License Renewal Points/2 PDP Hours

Algebra, Functions, and Data Analysis
Teacher Forum - Meeting 3 PDP

This professional development forum is designed to provide collaboration opportunities for teachers of the new course, Algebra, Functions, and Data Analysis. Participants will work together to share ideas, resources, and instructional strategies in order to support instructional practice and to foster increased student learning. This meeting will focus on third quarter topics and strategies to assist struggling learners.

Eligible Audience: Algebra, Functions, and Data Analysis Teachers and Special Education Teachers assigned to Algebra, Functions, and Data Analysis classes

P-MATH-0779-09-001

February 04, 2010

3:00 PM - 5:00 PM

Thursday

First Colonial HS - Room 602

Instructor: Nastelli, Kathy M.

2 License Renewal Points/2 PDP Hours

**Algebra, Functions, and Data Analysis
Teacher Forum - Meeting 4 PDP**

This professional development forum is designed to provide collaboration opportunities for teachers of the new course, Algebra, Functions, and Data Analysis. Participants will work together to share ideas, resources, and instructional strategies in order to support instructional practice and to foster increased student learning. This meeting will focus on fourth quarter topics and strategies to assist struggling learners.

Eligible Audience: Algebra, Functions, and Data Analysis Teachers and Special Education Teachers assigned to Algebra, Functions, and Data Analysis classes

P-MATH-0780-09-001

April 22, 2010

3:00 PM - 5:00 PM

Thursday

First Colonial HS - Room 602

Instructor: Nastelli, Kathy M.

2 License Renewal Points/2 PDP Hours

**Content Vocabulary for the Middle School
Mathematics Classroom PDP**

This course is designed to present strategies to enhance academic vocabulary development in the mathematics content area and discuss how to integrate them into the teacher's plans. The characteristics of effective direct vocabulary instruction will be explored, as well as the roles of content vocabulary lists and word walls. Lesson plans will be developed and shared.

Eligible Audience: Middle School Mathematics Teachers and Middle School Special Education Teachers assigned to mathematics classes



P-MATH-0781-09-001

June 23, 2009

8:00 AM - 11:00 AM

Tuesday

Landstown HS - Room 120

Instructor: Devries, Nicole M

3 License Renewal Points/3 PDP Hours

P-MATH-0781-09-002

March 23, 2010

4:30 PM - 6:30 PM

Tuesday

Brandon MS, Library

Instructor: Devries, Nicole M

2 License Renewal Points/2 PDP Hours

Geometry Content Review for Special Education Teachers PDP

This session will review content and SOL objectives for Geometry, Introduction to Geometry, and Geometry X special education teachers. Topics will include pedagogy and methodology for teaching geometry.

Eligible Audience: Secondary Special Education Teachers

P-MATH-0782-09-001

August 25, 2009

8:30 AM - 11:30 AM

Tuesday

Green Run HS, 210

Instructor: Jones, Christopher M

3 License Renewal Points/3 PDP Hours

Instilling Deeper Knowledge in the Algebra I Classroom PDP

Participants will explore the Algebra I curriculum to discover ways to engage students in relevant, authentic, and rigorous work. Instructional strategies that promote critical thinking and student-centered learning will be discussed. Participants will discuss the use of performance-based assessments and backward design to develop lessons that instill deeper content knowledge in the Algebra I classroom.

Eligible Audience: Algebra I Teachers and Special Education Teachers assigned to Algebra I classes



P-MATH-0783-09-001

June 24, 2009

8:00 AM - 11:00 AM

Wednesday

Landstown HS - Room 410

Instructor: Mazzacane, Tina

3 License Renewal Points/3 PDP Hours

Resources to Enhance the High School Mathematics Inclusion Class (Understanding Math, Algebra'Scool, and My Skills Tutor) PDP

This course will be led by successful co-teaching partners. Ready-to-use activities, lessons, and classroom management ideas will be shared. Explore resources and discuss techniques for successful inclusion and co-teaching experiences.

Eligible Audience: High School Special Education Teachers assigned to mathematics classes



P-MATH-0784-09-001

June 24, 2009

12:00 PM - 3:00 PM

Wednesday

Landstown HS - Room 227

Instructor: Horan, Dawn/Rusak, Melissa

3 License Renewal Points/3 PDP Hours

Starting Out with the TI-Navigator PDP

Starting Out with the TI Navigator. An introduction of TI-Navigator classroom learning system will be given. Participants will learn how to log on and use the Navigator from the student perspective. Participants will learn how to update the operating system, create a class, take screen shots and send Quick Polls. Basic troubleshooting techniques will be shared (finding the access point, charging hubs, linking). Participants will be given time to create classes and explore screen shots and quick polls. Please bring a TI-83PLUS or 84PLUS graphing calculator.

Eligible Audience: Middle and High School Mathematics Teachers and Middle and High School Special Education Teachers assigned to math classes

P-MATH-0785-09-001

August 17, 2009

8:00 AM - 11:00 AM

Monday

Cox HS, 109

Instructor: Pugliese, Elizabeth A

3 License Renewal Points/3 PDP Hours

Teaching 21st Century Skills in the Mathematics Classroom PDP

The purpose of this class will be on using enduring understandings, essential questions, and real-life situations along with hands-on simulations to help students focus on the big ideas in mathematics. We will look at lessons where students are engaged in a variety of learning "experiences" that require critical thinking and modeling skills, challenge students to ask higher-level questions, and to make connections to the "big ideas/concepts" of mathematics. This workshop will focus on all levels of Algebra (Pre-Algebra through Algebra II/Trigonometry) and is open to both middle and high school mathematics teachers.

Eligible Audience: Middle and High School Mathematics Teachers and Middle and High School Special Education Teachers assigned to mathematics classes

P-MATH-0786-09-001

January 12, 2010

4:30 PM - 6:30 PM

Tuesday

Princess Anne HS, 900

Instructor: Lang, Monica L

2 License Renewal Points/2 PDP Hours

Technological Resources for the Middle School Mathematics Teacher PDP

Participants will explore various technology resources available within their buildings and through the IRC. Teachers will learn how to search the IRC catalog to find supplementary resources, including DVDs, videos, and software, supporting specific SOL objectives. The Understanding Math 2008, Algebra'scool, Math'scool, and My Skills Tutor will also be presented. Teachers will see how these resources can be used within a lesson or as a remediation tool.

Eligible Audience: Middle School Mathematics Teachers



P-MATH-0787-09-001

June 24, 2009

8:00 AM - 11:00 AM

Wednesday

Landstown HS - Room 110

Instructor: McElligott, Dena R

3 License Renewal Points/3 PDP Hours

Textbook Implementation-Java Software Solutions for AP Computer Science/Pearson (Mandatory) PDP

This session is designed to support teachers of AP Computer Science who are implementing the new Pearson textbook. Participants will explore the textbook's components and receive their teacher's editions at this session.

Eligible Audience: High School Mathematics Teachers assigned to AP Computer Science A classes during the 2009-2010 school year



P-MATH-0788-09-001

June 24, 2009

8:00 AM - 11:00 AM

Wednesday

Landstown HS - Room 226

Instructor: Harrison, John

3 License Renewal Points/3 PDP Hours

P-MATH-0788-09-002

September 01, 2009

8:30 AM - 11:30 PM

Tuesday

Advanced Technology Center, Forum

Instructor: Consultant(s)

3 License Renewal Points/0 PDP Hours

Textbook Implementation-Statistics in Action: Understanding a World of Data/Key Curriculum Press (Mandatory) PDP

This session is designed to support teachers of AP Statistics who are implementing the new Key Curriculum textbook. Participants will explore the textbook's components and receive their teacher's editions at this session.

Eligible Audience: High School Mathematics Teachers assigned to AP Statistics classes during the 2009-2010 school year



P-MATH-0789-09-001

June 24, 2009

12:00 PM - 3:00 PM

Wednesday

Landstown HS - Room 226

Instructor: Consultant(s)

3 License Renewal Points/3 PDP Hours

P-MATH-0789-09-002

September 01, 2009

12:30 PM - 3:30 PM

Tuesday

Advanced Technology Center, Forum

Instructor: Consultant(s)

3 License Renewal Points/0 PDP Hours

TI-84 Calculator for Algebra I PDP

This course introduces ways of incorporating graphing technology into your Algebra lessons to enrich instruction and extend your students' comprehension. Essential Algebra I topics such as solving equations, transformations, systems of inequalities, proportional reasoning, and factoring are correlated to the NCTM Standards. Please bring a TI-83 Plus or 84 Plus Graphing Calculator.

Eligible Audience: Middle and High School Mathematics Teachers and Middle and High School Special Education Teachers assigned to Algebra I classes



P-MATH-0790-09-001

June 23, 2009

12:00 PM - 3:00 PM

Tuesday

Landstown HS - Room 408

Instructor: Horan, Dawn/Pugliese, Elizabeth

3 License Renewal Points/3 PDP Hours

TI-84 Calculator for Algebra II PDP

This course introduces ways of incorporating graphing technology into your Algebra II lessons to enrich instruction and extend your students' comprehension. Essential Algebra II topics such as transformations, linear programming, polynomial functions, sequences, and series matrices are correlated to the NCTM Standards. Please bring a TI-83 Plus or 84 Plus Graphing Calculator.

Eligible Audience: High School Mathematics Teachers and High School Special Education Teachers assigned to Algebra II classes



P-MATH-0791-09-001

June 23, 2009

8:00 AM - 11:00 AM

Tuesday

Landstown HS - Room 408

Instructor: Pugliese, Elizabeth/Rusak, M

3 License Renewal Points/3 PDP Hours

TI-84 Calculator for Beginning Users PDP

Teachers will be introduced to the TI-83 Plus or 84 Plus graphing calculator through activities appropriate for Algebra I, Introduction to Algebra I or Algebra I (X). Ideas for using the calculator on the SOL test will be included. Please bring a TI-83 Plus or 84 Plus Graphing Calculator. Level I
Eligible Audience: Middle and High School Mathematics Teachers and Middle and High School Special Education Teachers assigned to mathematics classes



P-MATH-0792-09-001

June 22, 2009

8:00 AM - 11:00 AM

Monday

Landstown HS - Room 405

Instructor: Goldstein, Abraham J

3 License Renewal Points/3 PDP Hours

P-MATH-0792-09-002

October 15, 2009

4:30 PM - 6:30 PM

Thursday
Cancelled

Kress Anne MS, Room 306

Instructor: Goldstein, Abraham J

2 License Renewal Points/2 PDP Hours

P-MATH-0792-09-003

November 17, 2009

4:30 PM - 6:30 PM

Tuesday

Landstown HS, 136

Instructor: Siock, Stacy L

2 License Renewal Points/2 PDP Hours

TI-84 Calculator for Geometry PDP

This course introduces ways of incorporating graphing technology into your Geometry lessons to enrich instruction and extend your students' comprehension. Please bring a TI-83 Plus or 84 Plus Graphing Calculator.

Eligible Audience: Middle and High School Mathematics Teachers and Middle and High School Special Education Teachers assigned to Geometry classes



P-MATH-0793-09-001

June 23, 2009

12:00 PM - 3:00 PM

Tuesday

Landstown HS - Room 405

Instructor: Howard, Dean

3 License Renewal Points/3 PDP Hours

Using Assessment to Drive Instruction PDP

During this class, participants will look at a variety of assessment types as well as develop assessments specific to your content area. Please bring your textbook and at least one unit test that you would like to critique and improve. This workshop will focus on all levels of Algebra (Pre-Algebra through Algebra II/Trigonometry) and is open to both middle and high school mathematics teachers.

Eligible Audience: Middle and High School Mathematics Teachers and Middle and High School Special Education Teachers assigned to mathematics classes

P-MATH-0794-09-001

November 04, 2009

4:30 PM - 6:30 PM

Wednesday
Elizabeth Anne HS, 900

Instructor: Lang, Monica L

2 License Renewal Points/2 PDP Hours

To Be Rescheduled

Using Modeling and Simulation to Teach Math and Science PDP

Learn how to engage 21st century learners by using modeling and simulation to teach math and science content. Computer-based models and simulations are designed to engage students to learn content while helping them see real-world connections. This presentation focuses on integrating modeling and simulation into standards-based curriculum. As participants learn about these tools, they will also see how they can be used to differentiate instruction and make their lessons more inquiry based. In addition to the introduction to modeling and simulation tools and examining lesson plans, participants will design a lesson in their own content area using modeling and simulation tools. These lessons will be shared with other participants in the training.

Eligible Audience: Middle School and High School Mathematics Teachers



P-MATH-0795-09-001

June 23, 2009

8:00 AM - 12:00 PM

Tuesday

Landstown HS - Room 110

Instructor: Burwell, Lori

4 License Renewal Points/4 PDP Hours

**Using Supportive Technologies in the
Secondary Mathematics Classroom:
PowerPoint PDP**

Participants will learn how to use a variety of supporting technologies including PowerPoint and how the application of the program will enhance and differentiate instruction for the 21st century learner.

Eligible Audience: Middle and High School Mathematics Teachers and Middle and High School Special Education Teachers assigned to math classes



P-MATH-0796-09-001

June 23, 2009

12:00 PM - 3:00 PM

Tuesday

Landstown HS - Room 226

Instructor: Fitz, Leigh A

3 License Renewal Points/3 PDP Hours

**Using Supportive Technologies in the
Secondary Mathematics Classroom:
PowerPoint and Movie Maker PDP**

Participants will learn how to use a variety of supporting technologies including PowerPoint and Movie Maker and how the application of the programs will enhance and differentiate instruction for the 21st century learner.

Eligible Audience: Middle and High School Mathematics Teachers and Middle and High School Special Education Teachers assigned to math classes

P-MATH-0797-09-001

August 26, 2009

8:30 AM - 10:30 AM

Wednesday

Green Run HS, 210

Instructor: Jones, Christopher M

2 License Renewal Points/2 PDP Hours

**Using Supportive Technologies in the
Secondary Mathematics Classroom:
SharePoint PDP**

This session will demonstrate how to use SharePoint to upload and share files. Participants will learn how students can submit work on SharePoint and how to keep daily notes for students to use via the Internet. They will also use SharePoint as a launch pad to other Web applications.

Eligible Audience: Middle and High School Mathematics Teachers and Middle and High School Special Education Teachers assigned to math classes

P-MATH-0798-09-001

August 25, 2009

1:00 PM - 3:00 PM

Tuesday

Green Run HS, 210

Instructor: Jones, Christopher M

2 License Renewal Points/2 PDP Hours

Using Supportive Technologies in the Secondary Mathematics Classroom: Smart Boards -- Beginner Users PDP

Participants will become familiar with the features of the Smart Technologies Smart Board. This technology will be explored and participants will gain familiarization with incorporating this classroom tool into instructional practices. The secondary mathematics classroom will be used as a model of instruction for the session.

Eligible Audience: Middle and High School Mathematics Teachers



P-MATH-0799-09-001

June 22, 2009

8:00 AM - 11:00 AM

Monday

Landstown HS - Room 227

Instructor: Harrison, Mary/Smith, Rebecca

3 License Renewal Points/3 PDP Hours



P-MATH-0799-09-002

June 23, 2009

12:00 PM - 3:00 PM

Tuesday

Landstown HS - Room 227

Instructor: Harrison, Mary/Smith, Rebecca

3 License Renewal Points/3 PDP Hours

Using Supportive Technologies in the Secondary Mathematics Classroom: Smart Boards -- Intermediate Users PDP

Participants will become familiar with the more in-depth features of the Smart Technologies Smart Board. Participants should already have a good understanding of and be comfortable using a Smart Board. The secondary mathematics classroom will be used as a model of instruction for the session.

Eligible Audience: Middle and High School Mathematics Teachers



P-MATH-0800-09-001

June 22, 2009

12:00 PM - 3:00 PM

Monday

Landstown HS - Room 227

Instructor: Harrison, Mary/Smith, Rebecca

3 License Renewal Points/3 PDP Hours

Using the TI-Navigator: Learning Check and Class Analysis PDP

Learning Check and Class Analysis. This session will focus on the TI-Navigator learning system components Learning Check and Class Analysis. Activities will be presented from both the student's and teacher's perspective. Participants will be given time to create Learning Checks as well as assess student knowledge using Class Analysis. The use of other TI software will also be discussed.

Eligible Audience: Middle and High School Mathematics Teachers and Middle and High School Special Education Teachers assigned to math classes

P-MATH-0801-09-001

August 19, 2009

8:00 AM - 11:00 AM

Wednesday

Cox HS, 109

Instructor: Pugliese, Elizabeth A

3 License Renewal Points/3 PDP Hours

Using the TI-Navigator: Screen Captures, Quick Polls and Activity Center PDP

Screen Captures, Quick Polls and Activity Center. This session will focus on the TI-Navigator learning system components of Screen Captures, Quick Polls and Activity Center. Activities will be presented from both the student's and teacher's perspective. Participants will be given time to practice screen captures and to create quick polls and activity centers. The use of other TI software will also be discussed.

Eligible Audience: Middle and High School Mathematics Teachers and Middle and High School Special Education Teachers assigned to math classes

P-MATH-0802-09-001

August 18, 2009

8:00 AM - 11:00 AM

Tuesday

Cox HS, 109

Instructor: Pugliese, Elizabeth A

3 License Renewal Points/3 PDP Hours

Using Smart Boards in Secondary Mathematics PDP

Participants will become familiar with the features of the Smart Technologies Smart Board. This technology will be explored and participants will gain familiarization with incorporating this classroom tool into instructional practices. The secondary mathematics classroom will be used as a model of instruction for the session.

Eligible Audience: High School Mathematics Teachers

P-MATH-0732-09-001

September 29, 2009

3:00 PM - 5:00 PM

Tuesday

Green Run HS, Room 210

Instructor: Jones, Christopher M

2 License Renewal Points/2 PDP Hours

P-MATH-0732-09-002

October 29, 2009

4:30 PM - 6:30 PM

Thursday

Green Run HS, Room 210

Instructor: Jones, Christopher M

2 License Renewal Points/2 PDP Hours

Understanding Math 2008 - Level 100 PDP

This is an introduction to the Understanding Math Series of programs and is meant for teachers that are new to the programs. In this workshop teachers familiarize themselves with the software, its navigation, and begin to make connections between the software, their curriculum, and other classroom/school resources.

Eligible Audience: Secondary Mathematics Teachers and Secondary Special Education Teachers assigned to mathematics classes



P-MATH-0803-09-001

June 22, 2009

8:00 AM - 11:00 AM

Monday

Landstown HS, Room 407

Instructor: Neufeld Math Consultants

3 License Renewal Points/3 PDP Hours

Understanding Math 2008 - Level 200 PDP

Teachers at this level are comfortable with the navigation and layout of the software and are usually beginning to incorporate it into their mathematics program. The focus here is on alternate implementation strategies that are highly effective in teaching mathematics concepts (e.g.: 3:1 student-to-computer ratio, concurrent use of manipulatives, Marzano's High Yield Instructional Strategies, and mathematics and literacy connections, etc.)

Eligible Audience: Secondary Mathematics Teachers and Secondary Special Education Teachers assigned to mathematics classes



P-MATH-0804-09-001

June 22, 2009

12:00 PM - 3:00 PM

Monday

Landstown HS, Room 407

Instructor: Neufeld Math Consultants

3 License Renewal Points/3 PDP Hours

Everyday Mathematics: Fine-Tuning Opportunities at Grade 6 PDP

This workshop is designed to assist sixth grade mathematics and special educators in deepening their understanding of Everyday Mathematics. Participants will identify successes and challenges experienced in teaching Everyday Mathematics as well as increase their understanding of the assessment and differentiation opportunities embedded within the program. Teachers will explore problem solving to understand how it is the foundation of the Everyday Mathematics program. Games and routines will be examined to better understand their role in fact fluency and problem solving.

Eligible Audience: Grade 6 Mathematics Teachers and Special Education Teachers assigned to grade 6 mathematics classes who are Everyday Mathematics 6 users



P-MATH-0805-09-001

June 22, 2009

8:00 AM - 11:00 AM

Monday

Litchfield HS, Room 400

Instructor: Minor, Beth

3 License Renewal Points/3 PDP Hours

Cancelled

AP Calculus Forum-Meeting 1 PDP

Teachers will discuss, plan, and share activities and strategies for student success in AP Calculus.

Eligible Audience: AP Calculus Teachers

P-MATH-0808-09-001

January 20, 2010

3:00 PM - 5:00 PM

Wednesday

First Colonial HS

Instructor: Hebert, Christine

2 License Renewal Points/2 PDP Hours

College Algebra and Trigonometry PDP

In this course, participants will examine relationships among quantities, including functions, explore ways of representing mathematical relationships, and analyze change. Topics examined will include investigations to deepen understanding of elementary algebra and functions by extending them to include nonlinear systems of equations and inequalities (linear programming); complex numbers; arithmetic and geometric series; logarithmic, exponential, and step functions; trigonometric functions; composite and inverse functions; conics; and recognition and application of trigonometric identities. This course is designed to cover content outlined in the Virginia regulations for the Algebra Add-On Endorsement.

Note: Tuition for this course is being paid by VBCPS. Books, materials and any college or university parking fees are the responsibility of the participant. Failure to enroll or successfully complete the course or activity through termination of employment, failure to attend or pass the course requirements with a grade of "C" or higher will result in the obligation of the Employee to reimburse the School Board entire amount of the tuition and related costs. BOOKS AND MATERIALS ARE THE RESPONSIBILITY OF THE PARTICIPANT.

Eligible Audience: Middle School Mathematics Teachers

C-MATH-0251-09-001

College Course: MATH 663

University of Virginia

January 20, 2010 - April 30, 2010

5:15 PM - 8:45 PM

Monday

Advanced Technology Center

Instructor: Pitt, Dr. Loren

3 Semester Hour/90 License Renewal Points/15 PDP Hours

Calculus PDP

This course is a three-credit graduate course designed to be a thorough refresher of Calculus I content that conforms to the National Council of Teachers of Mathematics (NCTM) standards. This course will provide teachers with a review of Calculus concepts in order to promote and encourage higher-level thinking among students as they study all levels of high school mathematics. It demonstrates the use of appropriate technologies and a background in Pre-Calculus is recommended. Topics will include (but will not be limited to) limits, continuity and rate of change, derivatives and differentiability, explicit and implicit differentiation, extreme values, related rates, definite integrals, and antiderivatives.

Note: Tuition for this course is being paid by VBCPS. Books, materials and any college or university parking fees are the responsibility of the participant. Failure to enroll or successfully complete the course or activity through termination of employment, failure to attend or pass the course requirements with a grade of "C" or higher will result in the obligation of the Employee to reimburse the School Board entire amount of the tuition and related costs. BOOKS AND MATERIALS ARE THE RESPONSIBILITY OF THE PARTICIPANT.

Eligible Audience: High School Mathematics Teachers

C-MATH-0297-09-001

College Course: MTH 696

Old Dominion University

January 09, 2010 - April 27, 2010

4:20 PM - 5:35 PM

Tuesday, Thursday

Virginia Beach Higher Ed Center

Instructor: Land, Lee Christine

3 Semester Hour/90 License Renewal Points/15 PDP Hours

Probability and Statistics PDP

The purpose of this course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students will be exposed to four broad conceptual themes: exploring data (describing patterns and departures from patterns), sampling and experimentation (planning and conducting a study), anticipating patterns (exploring random phenomena using probability and simulation), statistical inference (estimating population parameters and testing hypotheses).

Note: Tuition for this course is being paid by VBCPS. Books, materials and any college or university parking fees are the responsibility of the participant. Failure to enroll or successfully complete the course or activity through termination of employment, failure to attend or pass the course requirements with a grade of "C" or higher will result in the obligation of the Employee to reimburse the School Board entire amount of the tuition and related costs. **BOOKS AND MATERIALS ARE THE RESPONSIBILITY OF THE PARTICIPANT.**

Eligible Audience: Middle School Mathematics Teachers

C-MATH-0530-09-001

College Course: MATH 611

University of Virginia

September 14, 2009 - December 21, 2009

5:15 PM - 8:45 PM

Monday

Advanced Technology Center, Room H131

Instructor: Cenizal, M./McElligott D.

3 Semester Hour/90 License Renewal Points/15 PDP Hours

Topics in Statistics PDP

Topics in Statistics is a three-credit graduate course designed to introduce the basic concepts of statistics, the foundation of which lies in probability theory. This course provides the necessary foundation for secondary mathematics teachers in teaching the statistics and probability portion of lower level high school mathematics courses. The course provides an understanding of the kinds of regularity that occur in random functions and also provides experiences in associating probabilistic mathematical models with phenomena in the real world. Topics include but not limited to averages, measures of variation, frequency distributions, probability functions associated with random variables, binomial distributions, sampling, the normal curve, and statistical methods available for decision making.

Note: Tuition for this course is being paid by VBCPS. Books, materials and any college or university parking fees are the responsibility of the participant. Failure to enroll or successfully complete the course or activity through termination of employment, failure to attend or pass the course requirements with a grade of "C" or higher will result in the obligation of the Employee to reimburse the School Board entire amount of the tuition and related costs. **BOOKS AND MATERIALS ARE THE RESPONSIBILITY OF THE PARTICIPANT.**

Eligible Audience: High School Mathematics Teachers

C-MATH-0810-09-001

College Course: STAT 697

Old Dominion University

September 1, 2009 - December 10, 2009

4:20 PM - 5:35 PM

Tuesday, Thursday

ODU/NSU Higher Ed Center

Instructor: Corbin, Rose

3 Semester Hour/90 License Renewal Points/15 PDP Hours

Basic Training for the Smart Board PDP

Participants will become familiar with the features and capabilities of the Smart interactive white board. They will learn how to launch an application, write in digital ink, and save notes. Participants will also discover how to imbed handwritten notes into Microsoft Word and Excel software documents.

Eligible Audience: High School Mathematics Teachers

P-MATH-0813-09-001

October 21, 2009

3:00 PM - 5:00 PM

Wednesday

Landstown HS, Room 135

Instructor: VICOM CONSULTANT

2 License Renewal Points/2 PDP Hours

P-MATH-0813-09-002

October 28, 2009

3:00 PM - 5:00 PM

Wednesday

Landstown HS, Room 135

Instructor: VICOM CONSULTANT

2 License Renewal Points/2 PDP Hours

SECONDARY MATHEMATICS

2009-2010 PRE-APPROVED NON-DIVISION SPONSORED PROFESSIONAL DEVELOPMENT PROGRAM (PDP) ACTIVITIES

The following events are sponsored by organizations other than Virginia Beach City Public Schools; however, they are approved as acceptable Professional Development Program (PDP) activities. Teachers wishing to participate in these events should contact directly the sponsoring agency or institution to apply or register. All costs associated with the activity are the responsibility of the teacher and/or the school. **To acquire PDP credit for any of the activities listed below, the activity must relate to the participant's primary teaching assignment and attendance must be during off-contract hours.** Professional reasons leave may not be used to fulfill PDP hours. All PDP hours must be obtained beyond contractual hours. If any of the events listed below occur during contract hours, personal reasons leave may be used provided documentation is submitted verifying personal reasons leave was used to attend the approved alternative activity. **Evidence of participation and a completed Professional Development Program Non Division Sponsored Verification Form for Pre-Approved Activities must be reported to Joanne Lucas, Organizational Development.**

PLEASE NOTE: "In general the school board subscribes to the principle that no employee of the board shall be paid twice for the same work period," according to Virginia Beach City Public Schools School Board Policy 2-57. If pay is offered for participation in the pre-approved activity, then the PDP participant must decide whether pay or PDP is desired. Both cannot be earned for a single pre-approved activity. If pay is decided, then it is not necessary to complete the Pre-Approved Non-Division Sponsored Verification Form.

Virginia Department of Education Core Content and/or Instructional Strategies Academies (Maximum of 15 PDP Hours)

Designated Universities

Teachers who attend either or both of the Virginia Department of Education sponsored Core Content/Instructional Strategies residential workshops will receive PDP hours and license renewal points.

Evidence of participation and a completed Professional Development Program Non Division Sponsored Verification Form for pre-approved activities must be reported to Joanne Lucas, Organizational Development.

College Board Sponsored Advanced Placement Workshops (Maximum of 15 PDP Hours)

(3-5 days) Descriptions vary according to location. Registration is the responsibility of the teacher.

Evidence of participation and a completed Professional Development Program Non Division Sponsored Verification Form for pre-approved activities must be reported to Joanne Lucas, Organizational Development.

NCTM E-workshops (Maximum of 3 PDP Hours)

These workshops offer an electronic delivery platform, which allows educators the opportunity to actively participate in quality professional development experiences without leaving the comfort of

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their own homes or classrooms. For more information see their Website at <http://www.nctm.org/eworkshops/>.

Evidence of participation and a completed Professional Development Program Non Division Sponsored Verification Form for pre-approved activities must be reported to Joanne Lucas, Organizational Development.

T³ - Teachers Teaching with Technology (Maximum of 7 PDP Hours)

This is an international organization that sponsors regional and international conferences and summer institutes which focus on the use of hand-held technologies in the classroom. For dates and locations, check <http://education.ti.com/us/training/main.html>.

Evidence of participation and a completed Professional Development Program Non Division Sponsored Verification Form for pre-approved activities must be reported to Joanne Lucas, Organizational Development.

Tidewater Council of Teachers of Mathematics (4 PDP Hours)

This is the local affiliate of the National Council of Teachers of Mathematics that sponsors an annual conference each fall. Department contacts will receive registration information.

Evidence of participation and a completed Professional Development Program Non Division Sponsored Verification Form for pre-approved activities must be reported to Joanne Lucas, Organizational Development.

Virginia Council of Teachers of Mathematics (Maximum of 7 PDP Hours)

This is the state affiliate of the National Council of Teachers of Mathematics that sponsors an annual conference each spring. For dates and locations, check <http://www.vctm.org>.

Evidence of participation and a completed Professional Development Program Non Division Sponsored Verification Form for pre-approved activities must be reported to Joanne Lucas, Organizational Development.

Mathematics Content Courses (Maximum of 15 PDP Hours)

Various universities or colleges

Teachers who elect to take a three-credit mathematics content course at a college or university may receive PDP hours. The course must be identified with a mathematics prefix.

Evidence of participation and a completed Professional Development Program Non Division Sponsored Verification Form for pre-approved activities must be reported to Joanne Lucas, Organizational Development.

Teacher-To-Teacher Workshops (Maximum of 10 PDP Hours)

The U.S. Department of Education has brought together some of the nation's most effective teachers and education experts to share with their colleagues research-based practices and proven methods of using data to inform instruction. Teacher-to-Teacher Summer Workshops, recently offered in various locations all over the United States, presented research-based practices that have been instrumental in closing the achievement gap. These workshops were taped and converted to the video-streaming format. These video courses will help teachers experience on-demand professional development to increase their knowledge and skills for improving student achievement. Check the following link to find out how to enroll, watch the programs, and complete the online

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follow-ups. <http://www.paec.org/teacher2teacher/gettingstarted.asp> The selected workshop must be directly related to your current teaching assignment and grade level appropriate.

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Teaching Geometry with The Geometer's Sketchpad (Maximum of 15 PDP Hours)

This is a professional-level, moderated, online course on using *The Geometer's Sketchpad*® software for teaching mathematics, particularly high school geometry. The course also offers pedagogical guidance and promotes discussion of how *Dynamic Geometry*® affects the teaching and learning of mathematics.

The course is divided into six week-long units. Participants have flexibility within each week but are expected to begin and complete the activities during the assigned week.

The registration fee for this course is \$225. Professional-level academic credit is available for an additional fee. Information for receiving this credit will be provided by the course moderator at time of registration confirmation. Check the following link to find out how to enroll and course dates: <http://keypress.com/x1860.xml>

Evidence of participation and a completed Professional Development Program Non Division Sponsored Verification Form for pre-approved activities must be reported to Joanne Lucas, Organizational Development.

National Council of Teachers of Mathematics Regional Conference & Exposition (Maximum of 15 PDP Hours)

This organization sponsors regional and national conferences, which focus upon the NCTM Principles and Standards. Check <http://www.nctm.org/conferences/default.aspx?id=52> for dates and locations.

Evidence of participation and a completed Professional Development Program Non Division Sponsored Verification Form for pre-approved activities must be reported to Joanne Lucas, Organizational Development.

PBS TeacherLine Courses (Maximum of 15 PDP Hours)

These courses provide online professional development through facilitated courses, a supportive learning community, and exemplary professional resources. For more information about specific offerings in mathematics check <http://www.virginiateacherline.org/>. Selected courses must directly correlate to teaching assignment. C.I.I. members can enroll for free (VBCPS is a C.I.I. member).

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ANTICIPATED SCHEDULE:

- **Patterns and Relations - Math 136**

Eligibility: Teachers, grades 6-8

Get to the heart of the matter. Learn to teach your middle schoolers how to represent, analyze, and generalize a variety of patterns - the very core of algebra. Solve sample pattern

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problems and connect the mathematics explored in the course with mathematics requirements in your district.

- **Enabling Students with Special Needs to Succeed in Math Class - Math 165**

Eligibility: Teachers, grades 6-8

Make mathematics accessible and understandable for all students, including those with disabilities. In this course, you will learn how to adapt your own curricula and work with special needs teachers to help your students succeed in the classroom. As your final task, you will develop a plan that builds accessibility strategies into your daily teachings.

- **Gender Equity in the Mathematics Classroom - Math 160**

Eligibility: Teachers, grades 6-8

Does your learning environment support math success for boys and girls? This course introduces techniques to evaluate your teaching style for gender bias while exploring strategies to increase gender equity in a standards-driven instructional setting. To complete the course, you'll develop a project that creates or maintains gender-equitable mathematics curricula.

- **Spatial Reasoning - Math 266**

Eligibility: Teachers, grades 6-8

Help students reach new heights of understanding with online activities and interactives that enable them to visualize 3-D objects from 2-D representations. Become familiar with the National Council of Teachers of Mathematics (NCTM) standards regarding visualization and spatial reasoning, mathematical justification, and informal versus formal reasoning. Identify problem areas for students and assess their understanding.

- **Math in Everyday Life - Math 186**

Eligibility: Teachers, grades 6-8

Math is all around us and you can energize middle school math instruction with real-world challenges. Examine the importance of problem-solving skills, calculators, and the Internet in the classroom while addressing national math standards.

- **Rational Numbers, Fractions, Decimals, and Percents - Math 246**

Eligibility: Teachers, grades 6-8

Help your middle schoolers unravel the mysteries of rational numbers, fractions, decimals and percents. Using sample problems, you will build your understanding of how students approach their study, and learn practical, proven ways to redirect their thinking. For a final project, you will create a rational number lesson plan that includes a student assessment component.

- **Making Comparisons with Data Analysis - Math 150**

Eligibility: Teachers, grades 6-8

Get the inside track on what data analysis concepts your middle schoolers understand—and where they are likely to struggle. Discover concepts that are integral to making comparisons, including distribution and measures of spread, measures of center, graphic representation and interpretation, and communication of data-based conclusions.

- **Just the Stats: Data Analysis - Math 211**

Eligibility: Teachers, grades 6-8

Learn to evaluate and select appropriate Web-based activities that help students learn data collection and analysis using National Council of Teachers of Mathematics (NCTM) standards as your guide to the ways technology can enhance the subject. You'll then be able to develop data analysis lessons that successfully integrate technology.

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- **The Odds Are Good: Probability - Math 216**
Eligibility: Teachers, grades 6-8
We'll bet that we've got what you're looking for! Discover techniques to develop lessons about probability that meet the National Council of Teachers of Mathematics (NCTM) standards, use technology as a teaching tool, and incorporate new pedagogical strategies for teaching probability to middle school students.
- **Measurement: Surface Area and Volume - Math 240**
Eligibility: Teachers, grades 6-8
Clarify the concepts of surface area and volume for middle schoolers using nets/maps, interactives and the van Hiele model of geometric thought. Learn how to encourage students' reasoning, while addressing the National Council of Teachers of Mathematics (NCTM) standards. Utilize PBS's resources such as *Misunderstood Minds*, to address students with math disabilities. Create a lesson on surface area and volume.
- **Seeing Math™: Proportional Reasoning - Math 430**
Eligibility: Teachers, grades 6-12
Discover techniques to successfully guide your students through the critical transition from elementary mathematics and computing to the more complex, proportional thinking of algebra. Adapt problems from your curriculum to different learning styles using graphing, multimedia technology, and other strategies.
- **Seeing Math™: Data Analysis - Math 455**
Eligibility: Teachers, grades 6-12
"What do the measures of central tendency—mean, median, and mode—tell you about the data?" Teach your students how to answer that question and encourage them to look beyond calculations and individual data points. Explain how the measures are related to the whole set and see the data as an aggregate; help students perform higher-order statistical thinking.
- **Seeing Math™: Linear Equations - Math 420**
Eligibility: Teachers, grades 6-12
Develop strategies for teaching students how to represent and manipulate linear equations. Examine the rationale behind the symbol manipulation that maintains an equality or corresponding inequality. Use symbolic and graphic techniques to solve equations.
- **Seeing Math™: Linear Functions - Math 410**
Eligibility: Teachers, grades 6-12
Discover a fresh approach to teaching linear functions through the use of real-world problems that generate varied approaches and solutions. Learn how multiple representations and solutions strengthen students' understanding of functions, equations, and problem solving.
- **Seeing Math™: Transformations of Linear Functions - Math 415**
Eligibility: Teachers, grades 6-12
Learn how to help students grasp the symbolic representations of functions, while representing families of linear functions in multiple formats. Observe and discuss videos of students to gain insight into student thinking and explore strategies to address their misconceptions. Acquire interactive software and activities to use in the classroom that demonstrate the link between symbolic forms of linear functions and graphical forms.

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- **Seeing Math™: Quadratic Equations - Math 445**
Eligibility: Teachers, grades 6-12
Move beyond tried-and-true quadratic equation teaching techniques and look at the big picture: what the results reveal, how to interpret them within the context of a problem, and how to find related information. Manipulate the three symbolic forms of a quadratic function in order to inspect and predict shape, orientation, and location, and connect graphic and symbolic representations.
- **Seeing Math™: Transformations of Quadratic Functions - Math 440**
Eligibility: Teachers, grades 6-12
Work with families of quadratic functions to help your students understand what makes a function quadratic. Explore the information conveyed by polynomials, vertex and root forms, and assist students in shifting between object and process viewpoints. As a final project, you'll create a lesson plan or action plan applying the strategies learned.
- **The Concept of Function - Math 156**
Eligibility: Teachers, grades 9-12
Understand more about what confuses your high school students when they encounter the theory of function. You'll examine theories of function as a process, a mathematical object, and a tool for description and prediction, and learn new ways to present the concept to your students.
- **Applying the NCTM Principles in Grades 9-12 - Math 305**
Eligibility: Teachers, grades 9-12
Through a combination of Web, text, video, and discussion features learn to apply key concepts and strategies for integrating the six NCTM principles into your specific curriculum as you design a plan to improve student learning.
- **Seeing Math™: Systems of Linear Equations - Math 425**
Eligibility: Teachers, grades 6-12
Uncover each step in the solution process as you learn ways to help your students master the skills they need to answer questions like these: "What does it mean to solve a system of linear equations?" and "What do all of the procedures used to solve such systems have in common?"
- **Seeing Math™: Quadratic Functions - Math 435**
Eligibility: Teachers, grades 6-12
Learn high-impact modeling and problem-solving techniques to teach quadratic functions. Learn how to use multiple representations - tables, graphs, and symbolic expressions - as powerful tools to model physical situations and predict patterns.
- **Ahead of the Curve: Exponential and Other Functions - Math 126**
Eligibility: Teachers, grades 6-8
Help middle school students function with functions. Study strategies for teaching exponential functions and growth, and solve a range of mathematical problems to understand the underlying mathematics of functions. Collaborate with peers online to find ways to recognize and address students' misconceptions.
- **Representing the Mathematics of Motion - Math 130**
Eligibility: Teachers, grades 6-8
Develop a student-centered pedagogical approach to teaching exponential functions. Create a lesson plan, aligned with NCTM standards, that prepares students for problems they may find on a state test.

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- **Calculating the Mathematics of Motion - Math 145**

Eligibility: Teachers, grades 6-8

Collect data and draw conclusions about speed based on experience. Analyze motion using algebra and measurement and identify student difficulties when calculating motion. Design consecutive lessons for the math of motion.

- **Proportional Reasoning - Math 171**

Eligibility: Teachers, grades 6-8

Target middle school students' misconceptions about proportionality, as you learn new ways to teach ratio, proportion, and percents. After exploring various student approaches to proportion problems, and collaborating with other course participants, you'll be prepared to craft a lesson plan designed to teach a concept of proportion using your new knowledge.

- **Understanding Linear Functions - Math 140**

Eligibility: Teachers, grades 6-8

Analyze student comprehension of linear functions, comparing multiple representations, representing patterns, and the $y = mx + b$ form. Use new teaching tools in your linear function lesson plans.

ADDITIONAL NON-DIVISION-SPONSORED ACTIVITIES

Additional non-division sponsored events that can be used to fulfill the PDP requirement may be made available throughout the year. Information on these opportunities will be made available through the coordinators, grade level/department chairs, lead teachers, or specialists.

PROFESSIONAL DEVELOPMENT ALTERNATIVES

Activities and/or events not included in this catalogue may qualify for up to fifteen (15) PDP hours per school year. Teachers seeking approval for an alternative request must submit a Professional Development Program Alternative Request Application to the appropriate director prior to the event or no later than two weeks following the event. Upon completion of the activity, the signed form must be submitted to the Office of Organizational Development with appropriate documentation verifying attendance and completion of the activity. See the PDP informational booklet for more information and the appropriate form.