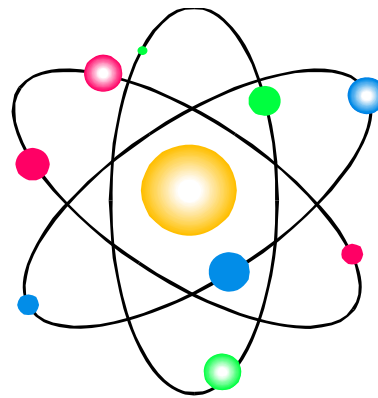




**BROOKDALE**  
COMMUNITY COLLEGE  
NEW JERSEY'S #1 ASSOCIATE DEGREE COLLEGE

**BROOKDALE  
MATH  
SCIENCE  
EDUCATION  
NETWORK**



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**2011-2012 Programs**

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**Marie Hartnett**  
Coordinator of Mathematics Programs

**Kate Hope**  
Coordinator of Science Programs

# Brookdale Education Networks

**Brookdale's Education Networks** – 3 Membership-based programs geared towards providing a high quality, cost effective solution for area school districts' training needs. Districts pay one flat fee and receive admission to all day-long workshops as well as added membership benefits.

See page 11 for Math-Science Network rate schedule.

**NEW** - **Added Benefits** for Network membership: Special member rates for in-service; on-line training and special workshops along with these 3 free after-school programs.

**Members will be able to register for these free After-School Workshops (Pre-Registration is required)**

## **Tourette Syndrome & Associated Disorders (ADHD/OCD)**

- Learn about Tourette Syndrome and its associated disorders such as ADHD and Obsessive Compulsive Disorder. Anxiety, depression, auditory processing and other learning disabilities will also be addressed. School related issues will be emphasized. The criteria for diagnosis/clinical assessment of Tourette Syndrome will be explained, along with current medical interventions. Examine strategies to help create a learning environment that supports the social/emotional and intellectual development of all students in the classroom. Accommodations regarding instruction and testing will be discussed, as well as classification, the 504 plan and the IEP. Examine modifications for behavior management. Discuss the nature of TS outside the classroom, gain an understanding of the whole child and how to develop a partnership with parents. Discuss specific concerns; and brainstorm instructional strategies using the course material and the handouts provided. **Location: Lincroft Campus** Tuesday, September 27<sup>th</sup> – 3:30 – 6:30 p.m.

## **Sandy Hook Sampler!**

- Join us after school for an introduction to the beaches, wetlands and forests of Sandy Hook. Come away with ideas on how to share this amazing local resource with your students. We'll embark from Brookdale's Ocean Institute near the famous Sandy Hook Lighthouse for an overview of the various ecosystems and ways to relate them to NJ's learning standards (CCS). **Location: Sandy Hook** (directions will be sent) Thursday, September 29<sup>th</sup> – 4:00 – 6:00 p.m.

## **Improve Student Achievement through Video Game Design**

- Calling all innovators! Learn about a unique research study being conducted through a private-public partnership with Black Rocket Productions and local learning institutions to measure the impact of student created video games on student achievement. Starting in the Fall of 2011, students in grades 4-8 will have the opportunity to develop video games with an emphasis on teaching content in Science, Language Arts, Math or Social Studies to their peers. Games will be published in a virtual learning community accessible to all participating schools. **1 hour webinar**  
Sect 1: Tuesday, October 4<sup>th</sup> – 4:00 – 5:00 p.m.  
Sect 2: Tuesday, October 11<sup>th</sup> – 4:00 – 5:00 p.m.

# MATH SCIENCE NETWORK WORKSHOP SCHEDULE 2011-2012

**LUNCH:** Please note that on-site facilities for lunch are not available at the Wall Campus. Directions for local restaurants will be provided.  
Please consider a “brown bag” lunch.

**LOCATION:** All programs listed below, unless otherwise indicated, will take place in the Brookdale Community College Higher Education Center at Wall

Monmouth Blvd @ 6<sup>th</sup> Street (Gate 3)  
Wall Township, NJ 07719  
**732.280.7090**

**FROM ROUTE 18 SOUTH:**

Exit 7A onto Brighton Avenue. Make a right at the stop sign onto Marconi Road. Proceed for ¼ mile and make right onto Monmouth Boulevard. Proceed for approximately ¼ mile and make a left into Gate 3. Parking is on the Right.

**FROM ROUTE 195 EAST:**

Route 195 to Route 18 North. Proceed to exit 6. Right onto Monmouth Boulevard. Stay on Monmouth Boulevard, going straight to the stop sign (Belmar Boulevard). Continue on Monmouth Boulevard for ¼ mile and make a right onto 6<sup>th</sup> Street (Gate 3). Parking is on the right.

**FROM NEW JERSEY GARDEN STATE PARKWAY:**

Exit New Jersey Garden State Parkway at Exit 98. Take NJ Route 138 (US Route 195) East to Route 18 North to Exit 6C. Make a right turn onto Monmouth Boulevard. Stay on Monmouth Boulevard, going straight to the stop sign. Continue on Monmouth Boulevard for 1/4 mile and make a right turn at the gate near the Brookdale Community sign. Parking and main entrance is on the south side of the building.

**EMERGENCY CANCELLATIONS:** Listen to radio stations WJLK –1310 AM/90.5FM, call the Lincroft campus at 732-842-1900 or go to our website [www.brookdalecc.edu](http://www.brookdalecc.edu) for information and if Brookdale Community College will be closed due to weather-related emergencies. If the college is **closed** for the day, the class is cancelled. If there is a delayed opening, the Network classes will begin when the college opens.

**Program 1.      *Activities to Connect NJ's Number Sense, Operations, and Algebra Standards to the New Common Core State Standards***

October 18, 2011  
Tuesday  
Grades 4-6

Jane Hannon  
Elementary Math Specialist, Retired  
NJ ASK Testing Committee Member  
Pat Fowler  
Elementary Math/Science Teacher, Retired

This hands-on workshop will provide teachers with detailed information about the content that students are expected to learn, including increased emphasis on fractions, number sense, and operations, and about how they can convey that content to their students. All materials will be provided so that teachers can do the hands-on activities in their own classrooms the day after the workshop!

**Program 2.      *Hands-on Elementary Science Experiments in Physical and Earth Science***

October 19, 2011  
Wednesday  
Grades Pre K-8

Bruce Marganoff, Ph.D.  
Science Education Consultant

This program will present a series of hands-on science experiments in Earth Science and Physical Science focused on enhancing teachers' background in content and experimental activities in these areas. These hands-on experiments will promote student interest, while strengthening their ability to recognize and use their alternate learning styles, data collection, data table building and formulating and testing a hypothesis.

**Program 3.      *How to Teach Algebra for Success by Asking the Right Questions***

October 25, 2011  
Tuesday  
Grades 7-10

Liz Marquez  
Presidential Awardee in Mathematics Education and  
Assessment Specialist (ETS)

Asking the right questions can make the pre-Algebra and Algebra 1 classrooms exciting, engaging and effective. By knowing which questions to ask and how to ask them, we can get students to meet the CCSS standards, know what math is good for, realize the power of its applications, enjoy the experience and be well prepared for the standardized testing the state may require.

**Program 4.****Project Learning Tree and GreenSchools! For Environmental Literacy**

October 26, 2011  
Wednesday

Grades Pre-K-8

Elizabeth Faircloth  
NJ Project Learning Tree Coordinator  
Department of Environmental Protection  
Division of Parks and Forestry

Find out how to implement student-centered investigations to help your students learn about the world around them and make a positive impact on their school and community. Project Learning Tree provides over 96 hands-on activities correlated to the NJ Standards across subject areas. Whether your school is urban, suburban or rural, your students can investigate the water, air, recycling, energy and outdoor environment to become environmentally literate. Each workshop participant will receive the Project Learning Tree PreK-8 activity guide, as well as training on how to implement the PLT GreenSchools! Program for their school.

**Program 5.****Understanding Math through Games and Activities**

November 8, 2011  
Tuesday

Grades K-4

Amy Caruso  
Mathematics Teacher, West Long Branch Schools

Have you ever finished a unit - only to find a folder of great games related to the skill, weeks later? Does the time involved in teaching and preparing for a game outweigh its usefulness? Games are a fun and effective approach to understanding and practicing math concepts, but preparation, management and time constraints can be challenging. This workshop will supply participants with games that can be adapted throughout the school year, allowing teachers the ability to match the skill to the game, rather than the game to the skill. Please come prepared to work and play as we test out certain games and adapt them to current classroom objectives. Bring a copy of your current text or student workbook.

**Program 6.****Bio-Blitz at Sandy Hook**

November 9, 2011  
Wednesday

Grades 5-8

Dave Grant  
Director, Ocean Institute at Sandy Hook

Join us at Sandy Hook for a modern and unique method to surveying our environment: This workshop will demonstrate how you can teach your students the methods scientists use to create a "snapshot" of different ecosystems. Learn techniques to identify and count samples of plants and animals in order to develop an ecological picture of an area as well as create a baseline to measure change over time. Aquatic, wetland and terrestrial habitats will be explored. Dress appropriately for the weather.

**This workshop will be held AT our SANDY HOOK facility 9:00 a.m. – 3:00 pm.**

*From the North: NJ GSP south to Exit 117. After tolls, bear to left to Rt. 36 East.*

*Follow signs for Sandy Hook/Gateway Natl Recreation Area (abt 13 miles). \**

*From the South: NJ GSP North to Exit 105 – Rt. 36 East. Get onto Rt. 36 East and follow signs for Seven Presidents Oceanfront Park. About 6 miles from Pkwy, at traffic light on Ocean Blvd., is a sign for Rt. 36 North. Turn left at this light-follow signs for Sandy Hook/Gateway National Recreation Area (abt 5.5 miles). \**

*\* Once on Sandy Hook, follow signs for the Sandy Hook Lighthouse and Fort Hancock (about 4 miles) and bear right into Fort Hancock – onto Magruder Road. Drive 1/4 mile – at the stop sign you will see Brookdale, Building 53, 100 yards West of the lighthouse.*

**Program 7.*****Hands-On Activities Involving Number Sense and Place Value***

November 15, 2011  
Tuesday

Sarah Renninger  
NJ ASK testing committee member  
Adjunct Professor, Rowan University

Grades K-3

Come and get lots of ideas and activities that will address number sense. Participants will engage in fun instructional strategies to support young students in learning place value, estimation, and constructing meaning for numbers. We will also look at some great math websites!

**Program 8.*****Elementary Engineering***

November 16, 2011  
Wednesday

Dana Woolley  
Science/Math Teacher, Howell Township School District

Grades K-6

Children are born engineers. They spend 95% of their time interacting with technology. For them to understand the world we live in, it is vital that we foster engineering and technological literacy among our children. In this workshop, teachers will learn how to implement standard-based units that investigate specific fields of engineering and use the engineering design process to complete specific tasks. This problem based learning process integrates science, math and technology skills which enables students to make real-life connections. As students work in groups to complete the task, they will experience many of the same successes and frustrations that engineers are faced with on a daily basis. Several units will be explored and all units and teacher's guides will be included.

**Program 9.*****Raise Their Level of Attention with the SMART Board, Engage Them All!***

November 29, 2011  
Tuesday

Ismat Shari  
Mathematics Teacher, Hamilton Township School District

Grades 6-12

Integrate the SMART Board into mathematics and increase student motivation. Different tools and techniques will be introduced in this workshop to make the teaching of mathematics fun for all. The SMART Board will allow you to differentiate instruction to meet the many different needs of your students. Come and learn how to apply different features of the SMART Board to enhance your teaching. Come and see how classifying numbers comes alive, how inverse functions make more sense, and many more classroom applications. You will leave with so many different ideas and so many different lessons to engage your class. This workshop is for teachers who have used and continue to use the SMART Board Interactive Whiteboard. A familiarity in using the SMART Board is required.

**Program 10.*****So This Is Chemistry?***

November 30, 2011  
Wednesday

Roseanne McCarthy  
Chemistry Teacher, Ocean Township High School

Grades 7-12

Explore chemistry concepts using mostly readily available supplies from the grocery, drug, hardware stores and teacher friendly/affordable websites. The workshop will provide inquiry-based and hands on science activities designed to excite and engage students and enrich lessons. All "make-and-takes", labs, demos and activities can be incorporated into your lessons "this week" as introductions, reinforcements or assessments.

**Program 11.*****Real World Mathematical Problem Solving***

December 6, 2011  
Tuesday

Karen (Perna) Gronikowski  
Mathematics Teacher, Hamilton Township School District

Grades 5-8

This course investigates the concepts and techniques of computation and applications of mathematics to solve and write real world problems, techniques for solving word problems in multiple ways and development of problem solving strategies assessed through written and oral communication. We will explore basic concepts in differentiation of mathematics instruction while using formative assessment techniques to create a classroom environment that meets the individual needs of the students. Through the use of essential questions, we will discover new ways to evaluate how well our students are connecting with math concepts in and out of the classroom.

**Program 12.*****Special Education: Strategies across the Curriculum***

December 7, 2011  
Wednesday

Patricia Higgins  
Special Education Teacher/Educational Consultant, South Plainfield Public Schools

Grades 5-8

The federal laws IDEA and No Child Left Behind require that all students be educated in the general education classroom to the fullest extent possible. As a result, many general education teachers are being asked to rise to the challenge of teaching students with learning disabilities. This workshop will briefly discuss special education law as it pertains to including students in general education, and introduce strategies and modifications that can be implemented across the curriculum. The focus of this workshop will be for teachers who work with students in grades 5-8 in the general education classroom.

**Program 13.*****Formative and Alternate Assessments***

December 13, 2011  
Tuesday

Joanne Deignan  
Mathematics Teacher, Middletown Township, HS South

Grades 6-12

Discover the importance of including formative and alternative assessments in your classroom. Learn ways to incorporate formative assessment of your students on a daily basis. Create interesting alternate assessments, with suitable scoring rubrics, that are appropriate for the course, grade and level that you teach.

**Program 14.*****Science is Fun and Mysterious!***

December 14, 2011  
Wednesday

Eva Ogens, Ed.D  
Supervisor of Science, Jersey City Public Schools

Grades K-5

Participants will experience hands-on inquiry based activities correlated with the new science standards which can easily be implemented into their classrooms. Connections between language arts literacy and science will be presented. This workshop will take the fear out of "doing" science with your students using simple and accessible materials, while fostering your students' curiosity.

**Program 15.      *Updating your Safety Competence for “Hands-On” Science Laboratory Instruction***

January 3, 2012  
Tuesday

Bruce Marganoff, Ph.D.  
Science Education Consultant

Grades 3-8

Science safety knowledge and competency become increasingly important as students engage in more complicated laboratory activities. Update your present safety knowledge through a series of hands-on activities and procedures, learn about the importance of documentation in reduction of potential litigation, and learn about safety equipment and how to properly use it to protect you and your students. Join in discussions about safety concerns with handicapped and special needs students in the classroom environment.

**Program 16.      *What are Basic Skills in Mathematics (and Why Don't My Students Have Them)?***

January 4, 2012  
Wednesday

Dr. Eric Milou  
Professor, Mathematics Department Rowan University

Grades 3-8

This session will examine what are the necessary mathematics basic skills from my perspective. Should all students know their multiplication facts by grade 4? What about long division? Fraction division? Algebraic symbolic manipulation skills? We will also examine the distinction between computational proficiency and number sense. Moreover, technology (video, websites, and more) will be demonstrated that can enhance basic skill recall.

**Program 17.      *Science Explorations for Middle School Teachers***

January 10, 2012  
Tuesday

Eva Ogens, Ed.D  
Supervisor of Science, Jersey City Public Schools

Grades 6-8

Participants will experience hands-on inquiry based activities correlated with the new science standards. The workshop will offer practical explorations in physical, earth, and life sciences which can be integrated into your current curriculum. You will leave the workshop with many ideas and activities you can use in your classroom.

**Program 18.      *Using the SMARTBoard to Enhance Math Instruction: It's All Fun and Games***

January 11, 2012  
Wednesday

Karen (Perna) Gronikowski  
Mathematics Teacher, Hamilton Township School District

Grades 4-8

This course will provide lessons, internet links, games and activities incorporating the Standards (Number and Operations, Algebra, Geometry, Measurement and Data Analysis, and Probability) adapted for use on the SMART Board. Math connections to other subject areas will be explored.

***(Bring a flash drive to save individual lessons.)***

**Program 19.**

***Environmental Education for Early Learners with Project Learning Tree and Project WILD***

January 17, 2012  
Tuesday

Elizabeth Faircloth  
NJ Project Learning Tree Coordinator  
Dept. of Environmental Protection, Div. of Parks and Forestry

Grades Pre-K -2

Both Project Learning Tree and Project WILD have new programs to reach early learners with hands-on nature investigations. Through sensory activities, music and song, movement and dance as well as snacks and crafts, students gain an awareness of the natural world. Each workshop participant will receive the award-winning Project Learning Tree "Environmental Experiences for Early Childhood" guide and music CD as well as the Project WILD "Early Learners" guide, supplemental materials that support the lessons in New Jersey, as well as craft and snack ideas for your classroom.

**Program 20.**

***Incorporating Children's Literature in Math***

January 18, 2012  
Wednesday

Sarah Renninger  
NJ ASK testing committee member  
Adjunct Professor, Rowan University

Grades K-3

Have fun listening to and engaging in children's literature that addresses a variety of math topics. Participants will be involved in hands-on activities that relate to a book. Math songs and poems will also be presented.

**Program 21.**

***Literacy in Science***

January 24, 2012  
Tuesday

Kate Hope  
Science Teacher, Howell Township Schools

Grades 6-12

Explore the new "Standards for Literacy in History/Social Studies, Science and Technical Subjects" for Grades 6-12 and learn ways you can incorporate reading and writing into your science curriculum. This hands-on workshop will focus on ways to encourage students to integrate language arts into their science class. Fostering good communication skills across the curriculum not only helps to increase retention, it also develops problem-solving skills for real life situations. Different writing styles will be addressed and you will leave this workshop with many activities you can use in your classroom.

**Program 22.*****Activities to Connect NJ's Measurement, Data and Geometry Standards  
To the New Common Core State Standards***January 25, 2011  
Wednesday

Grades 4-6

Jane Hannon  
Elementary Math Specialist, Retired  
NJ ASK Testing Committee Member  
Pat Fowler  
Elementary Math/Science Teacher, Retired

This workshop will focus on a variety of hands-on activities that will stimulate and motivate your students to learn the roles of measurement, data, and geometry in everyday mathematics. Teachers will be provided with detailed information about the content their students are expected to learn, as well as materials to use in their classrooms the next day.

**Program 23.*****Intrigue Your Students with Life Science***January 31, 2012  
Tuesday

Grades 7-12

Chryseis Apostolou  
Biology Teacher, Manasquan High School

Use labs and activities to captivate your students' minds and enhance their comprehension of life science. Through the integration of kinesthetic and inquiry-based learning, this course will provide methods and materials to address the core-curriculum standards as well as prepare the students for the EOC biology test. Leave the workshop with new experiments and ideas you will be able to incorporate immediately into your lesson plans!

**Program 24.*****Integrating Geometer's Sketchpad into Algebra***February 1, 2012  
Wednesday

Grades 6-12

Ismat Shari  
Mathematics Teacher, Hamilton Township School District

Enhance your algebra class's learning experience with a unique visual representation of graphs. Combine accurate graphing capabilities with Geometer's Sketchpad to provide a more engaging way to explore concepts extending beyond the possibilities of traditional manual graphing. From plotting points into the coordinate plane, to slope, to function transformations, Sketchpad allows you to differentiate instruction to better explain a concept and engage students in the presentation. This unique visual representation will hence increase student motivation. This workshop is for beginner and intermediate users of Sketchpad and any teacher who is teaching graphing (from plotting points to function transformation). You will leave with ideas to energize your classroom.

**Program 25.*****Outreach 2012: A Conference for Monmouth County School Professionals***March 23, 2012  
Friday  
8:30 a.m. – 2:30 p.m.Donna Cuddy  
Associate Director – Transfer Resources  
**Brookdale Community College, Lincroft Campus**  
**Donald D. Warner Student Life Center**

The goal of **Outreach 2012** is to foster improved communication between Brookdale Community College and Monmouth County middle and high schools in order to facilitate a smooth transition for prospective college students.

***Please note this program will be held at the Lincroft campus.***

**For additional information, please call Donna Cuddy at 732-224-2574.**



## Brookdale Math/Science Education Network

\_\_\_\_\_ We will become a member of the  
Brookdale Math/Science Network for the  
2011-2012 school year

\$\_\_\_\_\_ Total dues commitment

\_\_\_\_\_ Total seats in each workshop

### Please indicate which Level of \*\*Membership:

- \_\_\_\_\_ Level A - \$1,200. - 1 seat
- \_\_\_\_\_ Level B - \$2,400. - 2 seats
- \_\_\_\_\_ Level C - \$3,600. - 3 seats
- \_\_\_\_\_ Level D - \$4,800. - 4 seats

\*\*New District Memberships – see rates above.

Returning Members – Please refer to rate  
correspondence sent previously.

District and School \_\_\_\_\_

Chief School Administrator \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_

Phone \_\_\_\_\_ FAX \_\_\_\_\_

Email \_\_\_\_\_

Network Contact Person and Title \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_

Phone \_\_\_\_\_ FAX \_\_\_\_\_

Email \_\_\_\_\_

Please Mail/FAX this form no later than **June 30, 2011** to:

Brookdale Education Networks  
Outreach, Business & Community Development  
Brookdale Community College  
765 Newman Springs Road  
Lincroft, NJ 07738-1597

**FAX:** (732) 224-2664