



Science News



Volume 1, Issue 6

January 2008

CALENDAR OF EVENTS

SAVE THE DATES:



The 3rd Annual Celebration of Teaching & Learning
March 7th-8th, 2008

Core Curriculum Showcase
March 25th and March 26th, 2008

NSTA Science Convention
Boston, MA
March 26th - 30th , 2008

Planning Guide/Pacing Calendar
Unit 3 Begins around January 29th
Unit 4 Begins Around April 10th

31st Annual SCONYC Conference
Saturday, April 12th, 2008
Stuyvesant High School



If you would like to be placed on the science distribution list, please e-mail Roy Harris at RHarris2@schools.nyc.gov

The Department of Mathematics and Science

CONTACTS

LINDA CURTIS-BEY, *Director, Department of Mathematics and Science*

LCurtis@schools.nyc.gov

JOYCE VERLEY, *Secretary*

JVerley@schools.nyc.gov

JOE QUIGLEY, *Research Assistant*

JQuigley@schools.nyc.gov

SANDRA JENOURE, *Math/Science Consultant*

SJenoure@schools.nyc.gov

ROY HARRIS, *Elementary Instructional Specialist*

RHarris2@schools.nyc.gov

SHELDON YOUNG, *Middle School Instructional Specialist*

SYoung14@schools.nyc.gov

DENISE MCNAMARA, *High School Instructional Specialist*

DMcNama@schools.nyc.gov

JOHN TOM, *Urban Advantage Liaison*

JTom3@schools.nyc.gov

MARIANITA DAMARI, *Hunter College MSP in NYC Liaison*

MDamari@schools.nyc.gov

52 Chambers Street, Rm. 208
New York, NY 10007
Tel.: 212-374-0703
Fax: 212-374-5901



Check out our expanding website at:

<http://schools.nyc.gov/Academics/Science/default.htm>

We have added some important links for you such as:

Recommended instruction time for science
FOSS, Harcourt and Glencoe NYC Websites

All past issues of the Newsletters

Update on the planning guides

Science professional development opportunities

Science Websites and E-Mails

NYC Department of Science Website

<http://schools.nyc.gov/Academics/Science>

NYC FOSS Website

www.fossweb.com/nyc

If you have any questions for FOSS, please e-mail:

fossnyc@berkeley.edu

NYC Harcourt Website:

http://www.harcourtschool.com/menus/science/index_nyc.html

If you have any questions for Harcourt, please e-mail:

Jeanette.Watley-Wilson@harcourt.com

Glencoe Website:

http://www.glencoe.com/sites/new_york/teacher/science/index.html

Environmental Protection Agency

<http://www.epa.gov>

Lawrence Hall of Science

<http://www.lhs.berkeley.edu>

NY State Education Department

<http://www.nysed.gov>

Sierra Club

<http://www.sierraclub.org>

National Oceanic Atmospheric Administration

<http://www.noaa.gov>

NSTA - Outstanding Science Trade Books for Students K-12

www.nsta.org/ostbc

New York State Educational Department (Science)

www.emsc.nysed.gov/ciai/mst/sci.html

National Science Foundation

www.nsf.gov

Science NetLinks

www.sciencenetlinks.com/You may find these and other links on our website under Miscellaneous.



Units 3 and 4 Delivery Update

Materials for Units 3 and 4 should be in your school at this point or arrive within the next week. If you do not receive the materials, please call the hotline at (718) 935-3334.

For the FOSS program, please check the boxes of student materials for the teacher manuals.

New Science and Math Resources at Free Website

More than thirty Federal agencies formed a working group in 1997 to make hundreds of federally supported teaching and learning resources easier to find. The result of that work is the Federal Resources for Educational Excellence (FREE) <http://www.free.ed.gov/> website. The following are recent additions in the areas of science, mathematics, and technology:

* Space Food and Nutrition Educator Guide

http://www.nasa.gov/audience/foreducators/topnav/materials/listbytype/Space_Food_and_Nutrition_Educator_Guide.html

Explores the history of preparing and packaging foods that taste good, provide necessary nutrients, and travel well in space. (National Aeronautics and Space Administration)

* Computing Life

<http://publications.nigms.nih.gov/computinglife> Looks at ways physicists, biologists, and artists are harnessing the power of computers to advance our understanding of biology and human health. Learn how flu is spread through school computer usage by multiple students, the movement of cells in our bodies, and the beating of a heart. Find out how computers help in the search for gene variations that could lead to disease. (National Institutes of Health)

* Suited for Spacewalking Educator Guide is a website from NASA that offers teaching materials for grades k-12 and higher education

<http://www.nasa.gov/audience/foreducators/topnav/materials/listbytype/>

Interesting Science Facts

* Each person sheds 40 lbs of skin in his or her lifetime.

* An individual blood cell takes about 60 seconds to make a complete circuit in the body.

* There are 1600 calories in a pint of Hippopotamus milk.

* The first bicycle was manufactured in 1817.

* A cockroach can live for 9 days without its head.

* 88% of all humans are right handed.

* Bill Gates is left handed.



Albert Einstein Distinguished Educator Fellowship Program

Attention K-12 teachers: Are you an experienced educator who is ready to make a difference on a national scale? If so, consider applying for an Albert Einstein Distinguished Educator Fellowship and prepare for a year of unique opportunities. As an Einstein Fellow you will spend a school year in Washington, DC sharing your expertise with policy makers. You may serve your Fellowship with Congress or one of several government agencies such as the Department of Energy, NASA, the National Science Foundation, the National Institutes of Health, the National Oceanic and Atmospheric Administration, or the National Institute of Standards and Technology.

The goal of the Einstein Fellows program is to provide an opportunity for teachers to inform national policy and improve communication between the K-12 STEM education community and national leaders. Selection is based on excellence in K-12 mathematics, science, or technology teaching; demonstrated leadership; an understanding of national, state, and local education policy; and communication and interpersonal skills. The Fellowship program was created in 1990 with support from the MacArthur Foundation. Congress formalized the program in 1994 by passing the Albert Einstein Distinguished Educator Fellowship Act. The Triangle Coalition administers the program under the direction of the Department of Energy. The online application opens October 1, 2007 - The deadline date for all applications is January 13, 2008.

Apply online at www.scied.science.doe.gov

2008 National Youth Science Camp(HS Seniors)

The National Youth Science Camp (NYSC), <http://www.nysc.org>, offers a fantastic opportunity for graduating seniors who intend to pursue an education and profession oriented toward science, mathematics, engineering, or medicine. The NYSC is a residential science education program that honors and challenges the two most promising high school science students from each state. The NYSC is an all-expense-paid **program** in secondary science education that will take place from June 29, 2008 – July 26, 2008 in the Monongahela National Forest, West Virginia

Applications are due by February 18, 2008. More information and applications may be found at

<http://www.emsc.nysed.gov/ciai/mst/science/natyouth.html>.

The DuPont Challenge 2008 Science Essay Competition (Grades 7-12)

Students have the opportunity to write a 700- to 1,000-word essay discussing a scientific discovery, theory, event, or technological application that has captured their interest. Essays are judged based on ideas and content; mechanics and conventions; organization; style and creativity; and originality. Students from grades 7-12 are eligible and essays are evaluated in two divisions: Junior Division (grades 7, 8, and 9) and Senior Division (grades 10, 11, and 12). DuPont and its collaborating partners are offering cash prizes totaling more than \$25,000. All entries for the 2008 contest must be received by **Jan. 28, 2008**. For more information, visit www.thechallenge.dupont.com.

Excelsior Scholars Program for Grade Seven Mathematics and Science Students

The New York State Department of Education is sponsoring a \$5,000,000.00 competitive grant opportunity to support the cost of summer mathematics and science programs for high performing mathematics and science students who will have completed seventh grade in June 2008. The purpose of this competitive grant is for New York State public and independent colleges and universities to provide advanced coursework, which must be in mathematics and science and must be aligned to the New York State learning standards at the commencement level. The program must include only eligible and other high performing students as defined in Section 100.14 of the Regulations of the Commissioner of Education.

<http://www.emsc.nysed.gov/sb/fall07site/regentsf07.html>

The Request for Proposal information can be found on the “Funding Opportunities/Allocations” link at

<http://www.emsc.nysed.gov> – Proposals must be postmarked by February 4, 2008.



Regents Examination Schedule- June 2008

Please check the revised edition of the New York State Regents Schedule at:

www.emsc.nysed.gov/osa/schedules/june08.htm

There has been some movement of the Regents examinations in Integrated Algebra and Chemistry. Please note these changes from the draft examination schedule that was previously posted on the State website.



Grade Eight Acceleration for Diploma Schedule

A statement has been issued by the New York State Department of Education to provide clarification on Part 100 of the regulations of the Commissioner of Education. Among several other points, one states: “Part 100 Regulations of the Commissioner of Education allow only eighth grade students the opportunity to be accelerated into high school courses in the eighth grade and to receive credit for use in satisfying diploma requirements. This provision does not extend to grade seven students. This information can be found in subdivision 100.4 (d) of the Part 100 Regulations of the Commissioner of Education and can be accessed at:

<http://www.emsc.nysed.gov/part100/pages/1004.html> or contact Ann Schiano at aschiano@nysed.gov for additional information.

Women, Minorities, and Persons with Disabilities in Science and Engineering

A new report from the National Science Foundation, “Women, Minorities, and Persons with Disabilities in Science and Engineering

<http://www.nsf.gov/statistics/wmpd/pdf/nsf07315.pdf>,” provides information about the participation of women, minorities, and persons with disabilities in science and engineering education and employment. The website contains data tables organized by topic (e.g., undergraduate enrollment, graduate degrees, employment) and also by group (e.g., Hispanics, minority women, persons with disabilities). Presentation slides are provided for easy downloading, and links to additional data sources and reports on these topics are provided. A complete update of the report is issued every 2 years.

Woods Hole Workshop for High School Teachers

The Marine Biological Laboratory (MBL), with support from the Howard Hughes Medical Institute (HHMI), is offering a professional development workshop in science education for high school teachers. “Discover the Microbes Within!”, The Wolbachia Project will take place April 11-13, 2008 at the Woods Hole Institute, one of the nation’s prominent biology institutions in Cape Cod, Massachusetts. The workshop will show teachers how to integrate inquiry, discovery, and contemporary research in biology into classroom labs and lesson plans. The deadline for applications is **January 15th**. For more information, contact Dr. Seth Bordenstein at sbordenstein@mbl.edu, or go to their website <http://jbpc.mbl.edu/~sbordenstein/workshop.html>

Office of Instructional Technology Courses for Science Teachers and Tech Coaches

The Office of Instructional Technology is offering great classes for Science teachers and Tech Coaches beginning this month. Below is a schedule of classes which are targeted to science teachers and tech coaches:

- 1) OIT Science: iProject Interactive Whiteboard II Science (featuring SmartBoard) 051-08-018-034 (begins 1/15/08)
- 2) OIT Science: Enrich Science Exit Projects Using Blogs, Templates, Excel, Online Resource Libraries, and PowerPoint 051-08-018-049 (begins 1/26/08)
- 3) OIT Science: iProject Interactive Whiteboard II Science (featuring SmartBoard) 051-08-018-035 (begins 5/13/08)
- 4) OIT Science: Enrich Instruction in a Severe Weather Unit Using Google Earth and Other Google Apps 051-08-018-131 (begins 5/15/08)
- 5) OIT Science: Enrich Instruction in a Severe Weather Unit Using Google Earth and Other Google Apps 051-08-018-129 (begins 5/17/08)

You can sign up through the ProTraxx online registration system <http://pd.nycoit.org> After you log in, we encourage you to explore all iTeach/iLearn classes by searching “iTeach/iLearn” and enrolling in the classes that you believe will enhance your work. To enroll in this class you can do an “Advanced Search” and enter the activity code, class name or “OIT Science:” under “Name of Activity Class.”

Habitat Ecology OnLine Course from the Bronx Zoo for Elementary Teachers

This online course will give teachers a background in basic ecology, biodiversity, adaptations, the importance of wetlands, and the complexities of temperate forests. Course members will explore human impact and interaction with the environment, and discuss effective methods for teaching ecology to elementary school children. This course is designed to give teachers the content and techniques they need to effectively teach ecology to elementary students and to integrate life science across the disciplines.

For more information, please visit:

www.learning.wcs.org/home/teacherwelcome.html

or call 718-220-5136 or click here:

http://schools.nycenet.edu/offices/teachlearn/science/Online_Habitat_Ecol_122007.pdf

Globe Opportunities for Students Ages 8-16

The GLOBE Program would like to inform you about the 2008 International Young Eco-Hero awards presented by Action for Nature. These awards

recognize the individual accomplishments of young people (ages 8-16) whose personal actions have significantly improved the environment.

Action For Nature will award cash prizes of up to \$500 to young Eco-Heroes from around the world for their outstanding accomplishments in environmental advocacy, environmental health, research or protection of the natural world.

Their individual initiatives will inspire others to preserve and protect our fragile environment.

If you are interested, please select the link below:

<http://www.actionfornature.org/eco-hero/ecoheroawards.html>

MSP inNYC Responsive Research Network

MSPinNYC Responsive Research Network is offering an opportunity for New York City Department of Education secondary mathematics & science educators and CUNY STEM faculty & graduate students to collaborate on research in the areas of student learning, teacher development, technology and/or higher education. Collaborative teams of researchers or individual researchers will be considered but collaborative teams will have preference. Applications can be found at: www.mspinnyc.org and the deadline for submission is January 25, 2008. For more information, please contact Marianita Damari at MDamari@schools.nyc.gov or (212) 722 - 4572.

Motorola Foundation Grants \$3.5 Million To Inspire Next Generation of Inventors

The Motorola Foundation has announced the recipients of its Innovation Generation Grants, a \$3.5 million initiative to inspire young people to embrace science, technology, engineering, and math (STEM). The 2007 Innovation Generation Grants support 106 breakthrough programs that use innovative approaches to develop interest in technology-related fields while strengthening leadership and problem-solving skills. The grants target programs that encourage girls and ethnic groups currently underrepresented in technology fields. Of the recipient programs, 41 percent serve African American students, 19 percent reach Hispanic youth, and 31 percent specifically target girls. The programs supported by the Innovation Generation Grants range from after-school and summer science enrichment programs to activities that promote innovative technology use and teacher-training initiatives.

Beyond funding, Motorola is linking recipients of the Innovation Generation Grants with each other through a new company-hosted portal site that helps expand and enhance the global network of advocates for innovation in science, technology, engineering, and math education. Many of the grants also will engage Motorola engineers and scientists as volunteers to guide, mentor, tutor, and provide valuable insight into the opportunities and excitement of their line of work. Since 2000, Motorola Foundation has contributed more than \$35 million in grants to a variety of programs that expand student access to science and technology fields. For a complete list of Innovation Generation Grant recipients, visit

www.motorola.com/giving

<http://www.motorola.com/giving>

January Birthday Corner

Stephen William Hawking - January 8, 1942

Stephen Hawking has worked on the basic laws which govern the universe. With Roger Penrose he showed that Einstein's General Theory of Relativity implied space and time would have a beginning in the Big Bang and an end in black holes.



Robert Hare - January 17, 1781 Developed the gas blowpipe and the Deflagrator, a form of voltaic battery.

Morris W. Travers - January 24, 1872 - English chemist who, with William Ramsay, first identified what were called the inert gases: krypton, xenon and radon.

Professional Development for Units 3 and 4 in Grades 3,4,6 of the Science Core Curriculum

Registration is still open for the Winter workshop series of 3 to 5 days of professional development for Unit 3 and 4: Grades 3, 4 and 6. The workshops are free of charge if your school has purchased science core curriculum materials. **Please note that the trainings for Units 3 and 4 are different from the Fall series for Units 1 and 2. Workshops are unit specific and teachers will need to be trained for each unit.** We have heard many concerns that if you had training in Unit 1 and 2, then you do not need to be trained in Units 3 and 4. It is very important for all teachers who will be teaching Units 3 and 4 to be trained correctly in these Units. Registration is still open. Even though the first series begins the second week in January, you can still register. Please use this link to register:



http://schools.nycenet.edu/offices/teachlearn/mathematics/Weekday_Series.doc

If you do not find a workshop you want to attend listed, it means the course is full and you must register at another site. We offer a site in Manhattan, Queens and Brooklyn.

The workshops are during regular school hours, so teachers must get permission from their supervisors to be released in order to attend. The workshops are spread over a few weeks so the attending teachers miss only one day of school every few weeks.

Saturday Series for

Units 3 and 4 is Cancelled

Unfortunately, due to low registration we had to cancel the Saturday series. We urge all teachers to register for the weekday series. You can find the registration at the following link:

http://schools.nycenet.edu/offices/teachlearn/mathematics/Weekday_Series.doc

Registration will stay open. When a course is filled, we take it off line.

We need your input.

We would like to know your thoughts why registration for the Saturday Series was very low. What can we do in the future to attract teachers for Saturday sign-ups? What other times of the year would PD offerings for the core curriculum work for you? Please e-mail your ideas to: Roy Harris at RHarris2@schools.nyc.gov

Weather and Climate P-Credit Course at the Center for Space Science

This spring, the NYC Center for Space Science (NYCCSSE) will be offering a p-credit course on the implementation of *Airplanes and the Atmosphere*. *Airplanes and the Atmosphere* is a Regents Earth Science curriculum module written by the NYCCSSE and the American Museum of Natural History (AMNH).



Using an inquiry-based approach, the curriculum module is structured to systematically explore the connections between the atmosphere, weather, climate, and airplanes. In the p-credit course, teachers will strengthen their knowledge of weather and climate as they develop strategies for implementing the curriculum in their classroom. Emphasis will also be placed on assessing student work. Course sessions will be either at the NYCCSSE or AMNH. Participants will be provided with course materials and some classroom supplies. The course will meet Tuesday and Thursday evenings from February 26th to March 27th. Registration starts January 7th. For more information, check out www.nyccsse.org/atmosphere or call (212)608-6164 x153.

Winter and Spring Catalog PD Offerings

We are offering courses for elementary, middle and high school science at a minimum cost. We have some exciting courses such as:

- *4th and 8th Grade Written and Performance State Test Training
- *Science Notebooking - Elementary and Middle School
- *Science Journaling- Elementary and Middle School
- *Earth Science -Part D Training- High and Middle School
- *Living Environment Labs- High and Middle School

Registration is still open for some Winter courses. Some of the courses begin very soon. We strongly urge you to register for some of these courses. They will enhance your classroom experience. We are also offering similar courses in the Spring Catalog, which can also be found at the following link:

<http://schools.nycenet.edu/offices/teachlearn/science/SciencePD.doc>

Principals need to pay through FAMIS to enable teachers to attend. After making a payment through FAMIS and obtaining a purchase order number, the teacher then can click on the "Click Here" tab and register. The teacher must have the purchase order number in order to complete registration.

Ordering Information for the Performance Portion of the 4th & 8th Grade State Science Exams

To assess elementary and intermediate level science programs and to assess student progress toward New York State standards in Science students, the New York State Science Performance Test is scheduled to be implemented between April 2, 2008 and May 7, 2008. Individual schools will select date(s) to test students. Performance kits and/or replacement parts for the 4th and 8th Grade Science Exams may be ordered through the FAMIS System. The vendor is Frey Scientific. Please click here:



http://schools.nycenet.edu/offices/teachlearn/science/Kits_Parts_4_8grade_performance_tests.doc

for item description, price and FAMIS number.

Elementary and Middle School Focus Groups

The Elementary and Middle School Focus and Leadership Groups have been meeting once a month. The members discuss the implementation of the new curriculum in their schools. They are usually broken into three groups for part of the meeting: blend schools, text schools and kit schools. The members have been discussing the planning guides, how the implementation of the curriculum is working in their school and how their school is scheduling periods for teaching science (elementary schools). All the members are bringing the “**science models**” used in their schools to teach science to the next meeting. We are looking for exemplary elementary schools that have adapted working models to teach science instruction at least 4 times a week for grades 3 and 4. If your school has a very successful model that works, please e-mail Roy Harris at RHarris2@schools.nyc.gov with the explanation of the model. We would like to visit schools with working and productive models and start to post them on our website to assist schools in using the creative ideas their colleagues have developed.



The members of the teams also gave a “wish list” for their schools. We will publish some of these wishes in the next issue. Wishes can come true!!!!

NSTA- National Conference on Science Education

This year’s NSTA convention is being held in Boston, MA from March 27-30, 2008. The National Science Teachers Association conferences offer teachers and administrators the opportunity to build your career, expand your content knowledge, develop new teaching techniques and share your interest in all things science. Many nationally known vendors are always at the conference and if you have the opportunity to join us at the convention you can also meet and take some workshops with the vendors of the NYC science core curriculum.



FOSS will be offering to NYC teachers free of charge numerous workshops and short courses in conjunction with the NSTA National Conference. Most of these sessions are conducted by FOSS development staff from the Lawrence Hall of Science. Please click here for information on the courses offered by FOSS:

http://schools.nycenet.edu/offices/teachlearn/science/NSTA_2008_PD_Offerings-FOSS.doc

You can visit www.nsta.org to check out information about the NSTA science convention in Boston and register to go to the convention. Please let us know if you are attending. E-mail Roy Harris at RHarris2@schools.nyc.gov

Science Classroom Libraries

Science trade books for Grades 3, 4 and 6 should be in your schools. If you have not received them call the core curriculum hotline at (718)935-3334. These classroom books are correlated to the New York City Scope & Sequence. Please utilize these links to help you coordinate each book to the specific grade unit.



Grade 3

http://schools.nycenet.edu/offices/teachlearn/science/NYCitySC_SS_Gr3.pdf

Grade 4

http://schools.nycenet.edu/offices/teachlearn/science/NYCitySC_SS_Gr4.pdf

Grade 6

http://schools.nycenet.edu/offices/teachlearn/science/NYCitySC_SS_Gr6.pdf