



2006
Winter/Spring/
Summer Programs

IDEAS Institute
Hofstra University

The IDEAS Institute Invites you to attend the following events!

For more information on any IDEAS event, you may contact the following people.

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**FREE Science Lectures and Events for the General Public,
Teachers and Students of All Ages**

Please Note: Teachers receive certificates of attendance for one hour toward Professional Development credit for attending these talks.

*Wednesday, Feb. 15, 2006

“Science and Non-Science: What Makes an Explanation Scientific?”

Dr. Christopher Eliot, Hofstra University Department of Philosophy

7:30 – 9:00 p.m., Student Center Theater, North Campus

What is a scientific explanation? Recent challenges to teaching evolutionary theory have questioned whether it offers the best explanation for living things. But what does it mean to have the best scientific explanation for something? This talk will explore some answers to this question offered by philosophers of science, drawing on examples from the history of science. This is an age old question relevant to scientific controversies of today.

*This is a “Discovery Nights at Hofstra” event, which is co-sponsored with Hofstra College of Liberal Arts and Sciences.

IDEAS Events 2006

FREE Science Lectures and Events for the General Public, Teachers and Students of All Ages

IDEAS Featured Speaker/Collaboration with the Cradle of Aviation

Thursday, March 16, 2006

Aliens of The Deep: Viewing of the IMAX film and talk by Dr. Maya Tolstoy, Marine Geophysicist at Lamont-Doherty Earth Observatory of Columbia University and Research Scientist for Aliens of the Deep project

6:30 – 8:30 p.m., Cradle of Aviation IMAX Theater

This very special evening is a collaboration between IDEAS, the Cradle of Aviation, and Dr. Maya Tolstoy, who was one of the four primary scientists on the expedition whose work became the "Aliens of the Deep" IMAX documentary produced by James Cameron. The IMAX film will be shown, followed by a talk about the science of the film by Dr. Tolstoy. Admission to the movie and talk are free. Seating is limited so please call the IDEAS Institute, 516-463-5792 to reserve a space.

This evening is funded through donations received by IDEAS in honor of the career in education of Pearl Halegua. IDEAS would like to thank Ms. Halegua and all those who contributed in her honor for making this free event possible.

IDEAS "Scholar in Residence" Events:

Thursday, April 20, 2006

"The Science Behind Jurassic Park and the Lost World"

Dr. Robert DeSalle, American Museum of Natural History

7:30 – 9:00 p.m., Student Center Theater, North Campus

Dr. DeSalle is a molecular biologist and curator who did some of the pioneering "Jurassic Park"-like extractions of fossilized DNA. He is the author of popular books including "The Science of Jurassic Park and the Lost World". He is the author of the "Genetics, Genomics, Genethics" course, which drew heavily on a Genomics exhibit at the Museum several years ago.

Saturday, April 29, 2006

"Behind the Scenes Tour" of the American Museum of Natural History"

Dr. Robert DeSalle, American Museum of Natural History

10:00 a.m. – 4:00 p.m., American Museum of Natural History, New York City, NY

Join us in exploring where the research scientists work at the AMNH. This tour will be limited to 15 adults – no one under 16, please. Attendees will provide their own transportation to and from the museum. Fees include admission to the museum and a guided walk through some of the areas not normally open to the public as well as a tour of the Genomic Revolution exhibit with Dr. DeSalle.

Reservations will be on a first-come-first served basis, and must include a check for the \$25 fee. See the IDEAS website (www.hofstra.edu/faculty/IDEAS) to download a reservation form or call 516-463-5792.

Professional Development Workshops

for Teachers and those interested in science

For more information on any course, call IDEAS at 516-463-5792

Saturday, January 21, 2006

“Teachers as Researchers:

Professional Development from the Inside Out”

Dr. Janice Koch, Hofstra University Dept. of Curriculum and Teaching

Action Research, also called classroom research or teacher research, is a term used to describe professionals studying their own practice in order to improve it. Applied to teaching, it involves gathering and interpreting "data" to better understand an aspect of your teaching that interests or concerns you. This workshop is designed to facilitate a process that engages you in your own professional development in your own classroom, allowing you to seek answers to your own questions.

Workshop is held from 9:00 a.m. – 2:00 p.m. on three days – 1/21/06, 2/11/06 and 4/1/06. (Participants must attend all three sessions.) Hagedorn Hall, South Campus

This workshop may be taken for 32 hours toward Professional Development credit or 3 semester hours of Hofstra University graduate credit.

Fee: \$300 (*does not include cost of graduate credit*)

This workshop is appropriate for all teachers, grades K-12.

Saturday, February 11, 2006

“Standards-Based Instruction: Doing the Work of Mathematicians and Scientists in the Classroom”

Kathy Chapman and Donna Migdol, Hofstra University Department of Curriculum and Teaching, Oceanside School District

Learn how to bring the content and process strands from the NYS Mathematics and Science Core Curricula into your everyday teaching practices. Experience standards-based teaching that incorporates inquiry, analysis and critical thinking. Explore hands-on and minds-on learning from geometry to algebra, and astronomy to electricity. Make the transitions from "activities" to meaningful investigations by using big ideas and essential questions.

This workshop may be taken for 8 hours toward Professional Development credit or 1 semester hour of Hofstra University graduate credit.

Fee: \$95 (*does not include cost of graduate credit*)

8:30 a.m. – 5:00 p.m. Hagedorn Hall, South Campus

This workshop is appropriate for teachers in grades 3-6

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Saturday, April 22, 2006

"Jurassic Park and High School Biology"

Dr. Robert DeSalle, American Museum of Natural History

Dr. DeSalle is a molecular biologist and curator who did some of the pioneering "Jurassic Park"-like extractions of fossilized DNA. He is the author of popular books including "The Science of Jurassic Park and the Lost World" and "Welcome to the Genome". He is the author of the "Genetics, Genomics, Genethics" course, which drew heavily on a Genomics exhibit at the Museum several years ago. During this workshop Dr. DeSalle will discuss his work and its relevance to high school biology classes.

This workshop may be taken for 6 hours toward professional development credit.

Fee: \$95

9:00 a.m. – 3:00 p.m. Hagedorn Hall, South Campus

This workshop is appropriate for teachers of science in grades 6-12

Saturday, April 29 and Sunday, April 30, 2006

"Regional Geology of the Taconic Range of New York: An Overnight Field Geology Workshop"

Dr. Charles Merguerian, Chairman, Hofstra University Geology Department

The Taconic mountain range of eastern New York State was created by a volcanic collision with the continental shelf edge of North America roughly 450 million years ago. Dr. Merguerian will lead a weekend field trip to examine the geologic record of this cataclysmic collision and to see how the present landscape developed over time.

This workshop may be taken for 16 hours toward Professional Development credit or 2 semester hours of Hofstra University graduate credit.

Leave campus 7:30 a.m. Sat. April 29, return about 6:00 p.m. Sunday, April 30, 2006

Fee: \$275 (Includes lodging and transportation, but *does not include cost of graduate credit.*)

This workshop is appropriate for teachers grades k-12 and interested members of the public.

Professional Development Workshops for Teachers and those interested in science

For more information on any course, call IDEAS at 516-463-5792

July 3, 5-8, 11-14, 2006

“MST Summer Institute at Hofstra”

Kathy Chapman and Donna Migdol, Hofstra University Department of Curriculum and Teaching, Oceanside School District

This two-week workshop engages teachers in professional development that exemplifies how the New York State Mathematics, Science, and Technology Standards can deepen knowledge and understanding of content and process skills. Make the “invisible, visible” as you learn how to turn constructivist theory into everyday practice. While working in a hands-on, inquiry-driven environment, discover the benefits of implementing “Big Ideas,” developing questioning techniques, integrating and enhancing curricula, incorporating engineering design, and exploring the latest computer and Internet applications that connect to instructional strategies. As a member of this learning community you will also observe these instructional strategies modeled in a discovery lab setting with children. During this time you will participate in peer review, and incorporate the art of reflection as an integral part of planning lessons.

This two week workshop can be taken for 50 hours toward Professional Development credit or for 3 or 6 semester hours of Hofstra University graduate credit.

8:30 a.m–3 p.m. each day, Hagedorn Hall, South Campus

Fee: \$1,200 which may be shared by district (*fee does not include cost of graduate credit*)

July 3 – August 13, 2006

“ONLINE Course: The OCEAN System: Integrated Science”

Cost for 64 hours toward Professional Development Credit: \$500

IDEAS, in collaboration with the American Museum of Natural History (AMNH) in New York City, will offer an online professional development course this summer. The course was developed by scientists from the AMNH and is designed for teachers in grades 4 through 12. It is co-taught by a museum scientist and a local science teacher. At the completion of the course, a certificate for sixty four (64) hours toward professional development credit will be awarded. The participating teachers will have a culminating activity “behind the scenes” at the AMNH. This is an opportunity for you to gain “an inside look” at the AMNH and a valuable course.

For more information on course content, please go to the Seminars on Science website of the AMNH website, <http://learn.amnh.org/> Registration and payment will be handled through IDEAS. For enrollment information, call IDEAS at 516-463-5792.

Professional Development Workshops for Teachers and those interested in science

For more information on any course, call IDEAS at 516-463-5792

July 17, 18, 20, 21, 2006

“Building Community in Your Classroom”

Dr. Robert Sigda, Hofstra University Department of Curriculum and Teaching

Dr. Sigda will present foundational and practical strategies that have the potential to dramatically increase student achievement and teacher satisfaction. Based on the work of Dr. William Glasser, Steven Covey, Alfie Kohn and many others, as well as years of personal experience with students, Dr. sigda will guide participants in strategies that can create a classroom environment where all the participants feel valued. The role of the teacher in creating a nurturing, caring and empowering learning space will be explored in this course. Dr. Sigda has been a visiting professor at Hofstra University since 1995 and a highly respected local and national figure in science education. In 1983, he served as President of the National Science Teacher Association.

This four-day workshop can be taken for 25 hours toward Professional Development Credit or for 3 semester hours of Hofstra University graduate credit.

9:00 a.m. - 5:00 p.m. on July 17, and 9:00 a.m. – 4:00 p.m on July 18, 20 and 21,
Hagedorn Hall, South Campus

Fee: \$400 (*does not include cost of graduate credit*)

July 22-29, 2006

“A Field Geology Workshop in Wyoming:

Geology of the Grand Tetons and Yellowstone National Park”

Dr. Charles Merguerian, Chairman, Hofstra University Department of Geology

This field workshop to western Wyoming will allow participants to study the geology of the Grand Tetons and Yellowstone National Park. Students will study volcanic, glacial, structural, and geothermal features and engage in small field projects. The trip will include visits to the Grand Teton range front fault, a hike through Cascade canyons, study of the Snake River terraces, and a side trip to the famous Gros Ventre landslide. Visits to notable sites are planned in order to study the geological history, geomorphology, and volcanic strata of the region. These sites include: the Grand Canyon of the Yellowstone, the Mammoth hot spring terraces, Old Faithful and related geysers, the petrified Sequoia forest, and the Hebgen Lake landslide.

This eight-day workshop may be taken for sixty four (64) hours toward Professional Development credit or for four (4) semester hours of Hofstra University graduate credit.

Fee: **\$1,800**, which includes airfare, ground transportation, housing and most meals. Fee does not include cost of graduate credit.