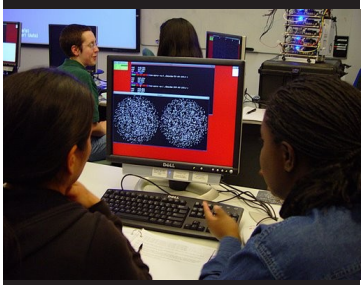

SC Education Summer Workshops
http://sc-education.org/workshops/

Register Now for Summer 2008

What are the SC Education summer workshops?
The SC Education program provides week-long workshops in High Performance Computing (HPC) education and HPC curriculum development for faculty, administrators, and students. These workshops focus on curriculum change and professional development concentrating on today's high performance computing environments.

What is the SC08 Education program?
The SC08 Education program uses hands-on based workshops to help attendees incorporate computational science and computational modeling into primarily the undergraduate curriculum. Topics may also include high performance computing and communications technologies in support of science and modeling. The intent of the curricular change is to prepare future scientists, technologists, engineers, and teachers. The program culminates in a week-long offering at the SC (Supercomputing) Conference in November.

Who is the intended audience?
The SC Education Program summer workshops are open to undergraduate and graduate educators in all fields of science, technology, engineering, mathematics, humanities, arts and social sciences, especially those from minority-serving institutions. The summer workshops are also open to high school teachers collaborating with college faculty. Faculty are encouraged to mentor and support undergraduate and graduate students by including them as part of a workshop team.

What are the workshop topics?
Topics for the 2008 summer workshop series include:

- Applications of HPC, Grids, and Parallel Computing to Science Education
- Computational Biology for Biology Educators
- Computational Chemistry for Chemistry Educators
- Computational Physics and Parallel Environments
- High Performance Computing in the Humanities, Arts and Social Sciences
- High Performance Computing in Nano and Bio Sciences Research and Education

What is the cost involved with attending?
Participants are asked to pay a registration fee of $150 and will be required to cover their own travel expenses. Room, board, most meals, and other costs associated with the workshop are covered by the SC Education Program.

When and where are the workshops?
See the reverse side for workshop locations and dates.

How do I register?
Visit **http://sc-education.org/workshops/** to register.

SC Education Summer Workshops

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Applications of HPC, Grids, and Parallel Computing to Science Education

We will begin with an emphasis on parallel and cluster computing in an educational setting and teaching issues in Grids and Parallel Environments. Examples suitable for classroom use will be presented, including both simple codes available for student modification and more complex state-of-the-art open source community codes. Participants will also be introduced to computational biology and computational chemistry tools and resources; dynamic modeling; simulation; molecular modeling; mathematical software; and visualization viz-a-viz distributed environments and tools.

Dates	Locations
June 15 – June 21	Navajo Technical College in Crownpoint, NM
July 6 – July 12	Grand Valley State University in Allendale, MI
July 20 – July 26	NCSA Access DC in Arlington, VA
Aug 10 – Aug 16	University of Oklahoma in Norman, OK

Computational Biology for Biology Educators

For persons interested in an in-depth introduction to dynamic modeling and bioinformatics, with a focus on their use in the undergraduate biology classroom. Participants new to computational science or those who have attended an interdisciplinary workshop are encouraged to attend. Also, prior participants are encouraged to apply.

Dates	Locations
June 2- June 6	University of Illinois in Urbana-Champaign, IL - registration fee waived
July 13 – July 19	Houston Community College System in Houston, TX

Computational Chemistry for Chemistry Educators

This workshop will cover various ways that computers can be used to enhance and expand the educational experience of students enrolled in the undergraduate chemistry curriculum. Discussions and hands-on laboratory exercises on visualization, simulation, molecular modeling, and mathematical software will be presented.

Date	Location
July 1 – July 7	University of Puerto Rico in Rio Piedras, Puerto Rico

Computational Physics and Parallel Environments

This workshop focuses on Physics education augmented with the resources of high performance computing (HPC). Primary workshop content draws from the traditional parallel computing curriculum, but additional focus is placed on the use of creating curricular content that demonstrates the use of high performance computing hardware to solve modern-day HPC problems.

Date	Location
June 1 – June 7	Kean University in Union, NJ

High Performance Computing in the Humanities, Arts and Social Sciences

This workshop aims to give HASS faculty, researchers and students intensive hands on experience for improving the quality of their work through access to advanced computing infrastructures and applications such as those provided by Grid, data analytic and visualization technologies. In general, the workshop will consist of a core set of presentations and hands-on sessions in computational HASS domain-dependent activities that will frame the resources within specific HASS domain research areas.

Date	Location
July 27 – Aug 2	University of Illinois in Urbana-Champaign, IL

Introduction to Modeling, Simulation, and Computational Methods

This three-day workshop is designed for faculty from a broad range of disciplines: science, technology, engineering, mathematics (STEM), and humanities, arts, and social sciences (HASS). The material covers a broad range of modeling and simulation techniques, e.g. cellular automata, dynamic systems, agents, and Monte Carlo methods. An introduction to using large-scale computational resources will be provided along with credentials and support for continued use of the computational resources after the workshop.

Date	Location
July 28 – July 30	Indiana University Northwest, IN – registration fee of $75

Integrating Computational Science into the Undergraduate Curriculum

The purpose of this workshop is to expose and inspire participants with new techniques, new curriculum and new applications to further Computational Science education. It will further efforts in advancing the computational sciences throughout the undergraduate curriculum and to bring faculty from different disciplines together so that they can learn how to bring computational research into their undergraduate classroom.

Date	Location
June 8 – June 14	Louisiana State University in Baton Rouge, LA

High Performance Computing in Nano and Bio Sciences Research and Education

This workshop leverages high performance computing resources and social networks to strengthen nano and bio sciences research and education. Participants in the workshop will be provided with theoretical and practical experiences at the interface of these domains to improve their scholarly work and further their disciplines.

Dates	Locations
June 22 – June 28	University of Texas in El Paso, TX
June 29 – July 5	CeNAT in San Jose, Costa Rica

This list is subject to change as more workshops are added. See the website for up-to-date information.