Texas Southern University Presents "Understanding Climate Change"



STEM Enchantment II

2013 Summer Outreach Program for Youth Sponsored by The Center for Research on Complex Networks of

> Texas Southern University Houston, Texas



Application

Program Overview

The Center for Research on Complex Networks (CRCN) of Texas Southern University will sponsor a science, technology, engineering, and mathematics summer program titled "**STEM Enchantment II.**" The four week program will be held on the campus of Texas Southern University (TSU), 3100 Cleburne Ave, and will run from Monday, June 17, 2013 to Friday, July 12, 2013.

This year's program will focus on "Climate Changes." Sixty students, grades 6-11, will have an opportunity to learn about climate change, energy use, and global warming, including how scientists, business leaders, and policy makers study and respond to climate change. They will also be exposed to how society and the environment will be impacted by global warming, and how they can help with making better decisions regarding all the complicated topics involved with climate change and global warming. More importantly, students will have an opportunity to participate in study groups focused on specific climate issues.

Students will receive several hours of classroom instruction in the following subject areas:

- Fundamentals of Environmental Science
- Atmospheric Science, Earth Science, and Computing
- Laboratories and demonstrations of environmental technologies
- Life Skills (improving study habits, setting goals, and team building skills)

Four (4) certified teachers and graduate students of TSU will work closely with students giving them a deeper understanding of concepts of environmental science and technology. Some of the most powerful lessons STEM students will experience are activities designed to enrich and expand their learning through active practical involvement.

The program offers a learning environment which will encourage students to identify and solve problems while increasing their knowledge in STEM related subjects. The major objective throughout the program us to educate, motivate, encourage and prepare students to start thinking seriously about pursuing a higher degree in a STEM related field. The program's curriculum will allow students to do research, discuss, and write reports on the relationship between climate and agriculture. They will pretend that they have just purchased farms in specific parts of the United States and will investigate that region's weather and climate in order to maximize the chances that their farms will succeed.

Special guest speakers from the: U.S. Environment Protection Agency (EPA), the Texas Commission on Environmental Quality, Harris County Pollution Control Services and City of Houston's Bureau of Air Quality Control will engage students in meaningful discussion on the impact of climate change. Four (4) field trips are planned during the course of the program, including a Saturday field trip with students and parents.

<u>Eligibility</u>

All candidates must meet the following eligibility requirements:

- Must be entering 6th, 7th, 8th, 9th, 10th, or 11th grade for the 2013 2014 school year
- Must attach or include latest report card
- Must complete the application package in full, including the teacher referral form. (Incomplete applications will not be considered)
- Submit a type written essay on the topic, "How does climate change affect my life?" The essay must be 200 to 300 words.
- Students must have an interest in science, technology, engineering, or mathematics (STEM).
- Parent(s) or guardian and student must be able to attend the mandatory Parent or Guardian and Student Orientation. The orientation will be held on Saturday, June 8th at 10:00 A.M.
- Application must be submitted by **Friday, May 3, 2013**.

Important Dates

- Friday, May 10, 2013 Application deadline
- Friday, May 17,2013 Announcement of Selection of Participants' Via Email
- Friday, May 31, 2013 Acceptance Confirmation by parent
- Saturday, June 8, 2013 Mandatory Parent/Student Orientation @ TSU (10:00 A.M)
- Monday, June 17, 2013 First Day of Class
- Friday, July 12, 2013 Last Day of Class/Closing Ceremony



2013 Enchantment II Program Student Application

Personal Information						
Name						
Parent's Name						
Address						
City, State, Zip Code						
Primary Phone Number						
Secondary Phone Number						
Parent's Email Address						
Student's Email Address						
Circle T-Shirt Size	S	М	L	XL		

School Information					
Grade Level (2013 – 2014 school year)	Age (Gender			
School Name					
City					
District					

Teacher Referral Information					
Subject Teacher Teaches					
Teacher Name					
Teacher Phone					
Teacher Email Address					

2013 Enchantment Program Teacher Referral Form

This page to be filled out by a Teacher (Please Print)								
Student Name								
Teacher's Name								
Teacher Email								
Teacher's Subject Area	Math	Science	Technology	Other:				
Name of School								
Please Circle your answer								
This Student:								
Is eager to learn	Continually	Often	Sometimes	Rarely	Never			
Turns in Work on time	Continually	Often	Sometimes	Rarely	Never			
Works well with others	Continually	Often	Sometimes	Rarely	Never			
Shows responsibility	Continually	Often	Sometimes	Rarely	Never			
Displays appropriate behavior	Continually	Often	Sometimes	Rarely	Never			
Demonstrates and interest in STEM fields	Continually	Often	Sometimes	Rarely	Never			

In what areas do you think the student need enhancement?

Thank you for completing this form for your student. If you have any questions, please feel free to contact Dr. Oscar Criner at (713) 313-7923. This form can be faxed to: 713-313-1853 or emailed to criner_oh @tsu.edu (Please put "STEM Enchantment II Application" in the subject line.).

Our mailing address is STEM Enchantment II, Office of Dean, College of Science and Technology, Texas Southern University, 3100 Cleburne Ave, Houston, Texas 77004, Nabrit Science Center, Room 131.

Program Application Form & Teacher Recommendation Form are due by Friday, May 10, 2013.