

at Southwestern

Program Description

The Science Training and Education Program at Southwestern (STEPS) is a no-cost, intensive, non-residential four-week college preparatory experience (no weekends) consisting of science and math courses, collaborative research experiences, and community and skill building activities for students who are interested in science and math. Exposure to a range of scientific experiences, college readiness workshops, research techniques, creative works, and other growth opportunities are core to the program's mission.

STEPS students take daily biology, chemistry, and math courses taught by full-time Southwestern University faculty and staff. These courses blend classroom study with laboratory experiments, individual and group projects, as well as field trips and other activities. All of the courses are designed to allow STEPS students to experience college science and math classes with a focus on helping them build confidence in their abilities and encouraging them to continue their education in the sciences.

STEPS students also have the opportunity to participate in several collaborative scientific research projects. Research rotations in chemistry, biology, physics, kinesiology and psychology (animal behavior) laboratories allow STEPS students to conduct hands-on scientific research using state of the art instrumentation. Each student participates in 3 research rotations, and will work in the research laboratory on a daily basis for the duration of the program.

STEPS students also participate in a number of activities designed to help them build specific skills as well as engage them within the Southwestern University scientific learning community. All STEPS students take part in laboratory safety training. Students also learn about scientific journals and research tools in the campus library. STEPS students participate in daily group activities that are coordinated by Southwestern undergraduate student mentors. STEPS students learn how to make scientific posters and at the end of the 4-week program, students present their research in a poster session attended by the participants' families as well as Southwestern University students and faculty. The poster presentations are followed by a celebration dinner.

The Science Training and Education Program at Southwestern primarily focuses on recruiting rising sophomores, juniors, and seniors who are financially needy, first generation college students, or from groups underrepresented within the sciences (e.g., Latina/o, African American, Native American, female). Other students are also welcome to apply.

Dates & Schedule

STEPS begins Monday, June 3, 2013, and ends with a family celebration event on the evening of Friday, June 28, 2013. STEPS classes and activities occur from 8:30 am – 5 pm Monday through Friday. Funds are available to students and their families to help offset the cost of travel to and from the Southwestern University campus.

Tentative schedule:

June 3: Orientation, team building, and safety training

June 3: Students begin research rotation 1

June 4: STEPS classes begin

June 10: Research rotation 2 begins

June 17: Research rotation 3 begins

June 21: Last day of research rotations

June 24: Students begin preparing scientific posters

June 28: Family celebration event with student research presentations



2011 STEPS students, Southwestern undergraduates, and faculty mentors

Southwestern University

Southwestern University is a selective, nationally recognized, undergraduate liberal arts and sciences college with an enrollment of 1,350 students. It is the oldest institution of higher learning in Texas. For more information visit www.southwestern.edu.

Contact Information

Application



at Southwestern

To the Applicant: Print out and complete the following application in its entirety. Please be as thorough as possible. This application should be submitted along with the statement from a counselor or science/math teacher. For full consideration, applications should be received by April 1, 2013. Please return your completed application to: Southwestern University, Dr. Emily Niemeyer, Attn: STEPS, P.O. Box 770, Georgetown, TX 78627-0770. Applications can also be faxed to 512-863-1696 or e-mailed to niemeyee@southwestern.edu (Please put "STEPS application" in the subject line). Questions? Call 512-863-1721.

F М First Name Middle Name Last Name Gender (circle one) Address (number and street) City State Zip Code Cell Phone Home Phone E-mail Address White Race/Ethnicity (optional): O African American O Hispanic Other: Parent 2 - Full Name Parent 1 - Full Name Gender Gender Occupation or Title Occupation or Title Has Parent 1 earned a college degree? O Yes O No Has Parent 2 earned a college degree? O Yes O No Brother/Sister Name(s) Grade or College(s) Attended Age High School Name: Graduation (mm/yyyy) Pre-Advanced Placement International Baccalaureate What kind of courses are you taking? Regular (Check all that apply) Advanced Placement O **Dual Credit** Honors

Possible college major or area of interest:					
High school science and math courses you have taken	Year (sophomore, junior, etc)	Letter or numerical grade earned	(A, B, 92%, etc)		
Do you currently work? O Yes O No	Do you expect to work this	summer? O Yes	O No		
Describe an experience that you had in a math or science course and how it influenced you to become interested in science/math.					

Why are you applying to STEPS and what do you hope to gain from the experience?				
Are you interested in going to college? Explain why.				
I hereby apply for admission to the Science Training and Education Program at Southwestern (STEPS) and certify that all of the information herein is my own work and, to the best of my knowledge, complete, factually correct and honestly presented.				
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Signature	Date			

Counselor or Math/Science Teacher Statement



To the Counselor, Math, or Science Teacher: Print out and complete the following recommendation statement. This statement, along with the student's application materials, must be received no later than <u>April 1, 2013</u> for full consideration. Please return completed form to: Dr. Emily Niemeyer, Attn: STEPS, P.O. Box 770, Georgetown, TX 78627-0770. Applications can also be faxed to 512-863-1696 or e-mailed to <u>niemeyee@southwestern.edu</u> (please put "STEPS recommendation" in the subject line). Questions? Call 512-863-1721.

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Student First Name	Student Middle Name	Student Last Name	
Student Address (number and street)	City	State	Zip Code
Counselor or Teacher Name	()	Title ()	
High School or Academy	Counselor/Teacher's Phone	Counselor/Teacher's Fax	
Counselor/Teacher's E-mail Address			
Counceler/Teacher's Cignature			Data

Please describe this student (i.e., academic motivation, relative maturity, initiative, special talents, etc.) to help us evaluate the viability of this student as a candidate for admission to the Science Training and Education Program at Southwestern. (Feel free to attach an additional sheet if needed)