On behalf of Lone Star College-North Harris and the HSI/STEM staff, I would like to welcome all of you to a new fall semester. We are excited to have you here, and we hope that you will take advantage of the many academic and personal development activities that we have planned for the 2013-2014 academic year at Lone Star College-North Harris, and at the Lone Star College-Greenspoint Center and Lone Star College-Victory Center.

We are very pleased with student retention and success rates in the Math 0310 and Math 1314 pilots, so this year we are expanding our math pilot courses to include Math 1316 (Trigonometry) and Math 2412 (Pre-Calculus) starting this fall. We have had very positive feedback from the students who enrolled in these pilot courses. These pilots are technology-based methodologies that enable students to spend more one-on-one time with their instructors. Pilot courses will be available to students at the LSC-North Harris campus, as well as the LSC-Greenspoint Center and LSC-Victory Center.

More than 190 female students participated in the Women in STEM Institute last year. Students were assigned mentors, listened to speakers in STEM fields, and participated in the first annual Women in STEM Conference. This year we will also be expanding our Women in STEM events to include an exciting speaker series that includes visits from professional women in the oil and gas, aerospace, and health industries. We are also planning field trips to STEM departments at four-year institutions.

Our Math Achievement Center – or MAC – has been a great source of support for our math students, with close to 500 student visits per week this past spring. This year we will increase the number of tutors to support student demand for tutoring services. In addition, more than 15 review sessions on selected math topics will be held in the MAC throughout the fall semester to support student success in math.

As you begin a new semester, I encourage you to participate in the semester-long Math Success initiatives planned for the fall. Stop by our office in WNSP-166, or call us at 281.765.7806 if you have any questions. You can also visit our website at LoneStar.edu/STEM.

I wish you a successful semester.

Sylvia M. Martinez
Director, HSI/STEM Grant
Math Achievement Center

The Math Achievement Center (MAC) has been a very busy place since its opening in the fall of 2012. Every week, the MAC serves between 400-500 students who come to the MAC to receive tutoring, to meet their study groups, or to complete assignments using the technology available at the MAC. This fall the MAC will expand its services to meet student demand and support math success.

The MAC will have more tutors available to help students with their math courses. This way, wait time for students will decrease, even as the number of students served increases.

Students enrolled in ALEKS Math courses will now be able to complete software-based lessons in the MAC. Tutors trained specifically in the ALEKS methodology and software will be available at various times during the week to support students who use ALEKS software in their courses.

One-on-one tutoring, laptop computers available at the MAC and face-to-face coursework, are then completed in class with the instructor who is available to provide feedback.

Assignments, homework, and labs are recorded lectures at home, on their own time and at their individual pace. These lectures are easily accessible from the students’ iPhone, iPad, Android phone, laptop, etc.

Exams and consistently willing to assist as much as possible.

The Math Success initiative at Lone Star College-North Harris has been very successful in improving learning outcomes and increasing access since the inception of the pilot classes. The math faculty has designed innovative pilot classes which utilize the newest technology and leading software in the field of mathematics and education.

Women in STEM Education (WISE) Institute

The Women in STEM Education (WISE) Institute was developed to expose female students in all STEM fields to the vast range of fields available in science, technology, engineering, and math. Throughout the 2011-2013 academic year, the Institute hosted outreach activities to approximately 200 students at the Lone Star College-North Harris Campus, the Lone Star College-Greenspoint Center and the Lone Star College-Kitchen Center. These were designed to be intellectually, socially, and personally stimulating. A few of the activities conducted during the spring 2013 semester included:

• WISE Institute “Hands on to Leadership” program, which hosted speakers from various arenas and elected officials such as Mayor Annise Parker, City Councilwoman Dr. Martha Wang, and U.S. Congresswoman Sheila Jackson Lee. Participants were exposed to science research poster presentations, career development skills focused on professional etiquettes and networking, and given an understanding of different leadership roles and styles.

• A Money Management Workshop, where students received “hands-on” experience completing a monthly budget and understanding the fundamentals of budgeting and saving.

STEM Pilot Classes

The Math Success initiative at Lone Star College-North Harris has seen outstanding results in improving learning outcomes and increasing access since the inception of the pilot classes. The math faculty has designed innovative pilot classes which utilize the newest technology and leading software in the field of mathematics and education.

One pilot class this past academic year was the flipped classroom. The flipped classroom is a combination of online classroom and face-to-face coursework, in which students complete recorded lectures at home, on their own time and at their individual pace. These lectures are easily accessible from the students’ iPhone, iPad, Android phone, laptop, etc.

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Star Watching in Physics 1404

Students who enroll in Planetary Astronomy (PHYS 1404) don’t just satisfy a science requirement. They also have the unique experience of watching the stars and the planets from a real observatory.

When Dr. Louis Jisonna, associate professor of physics, joined the physics department at Lone Star College-North Harris in the fall of 2011, he knew he wanted his astronomy students to have the opportunity to visit an observatory. While researching this goal, Dr. Jisonna met Aaron Clevenson, director of the Insperity Observatory located in Jack Fields Elementary School.

Together, they designed a plan by which students could complete part of the observation portion of their class grade by attending an optional observing session at the Insperity Observatory. “Often students don’t want to go, but need to satisfy the observation requirement. However, when they do, they are often amazed at what they see,” said Dr. Jisonna.

In the spring of 2013, Dr. Jisonna was able to purchase a special telescope that allows students to also directly observe the sun as part of another lab activity. Planetary Astronomy (PHYS 1404) is available in the fall and spring semesters. For more information about the course and the Insperity Observatory, please contact Dr. Jisonna at Louis.JisonnaJr@LoneStar.edu.

Insperity Observatory is open and free to the public on the first Friday of every month. For further information about the observatory you can visit humbleisd.net/observatory.

STEM Featured Student

If nothing is more contagious than example, here’s one example that students should emulate. Chloé Whittington, a second-year chemical engineering major who will transfer to Tuskegee University in the fall of 2013, was all smiles as she reminisced about her time at Lone Star College-North Harris. Chloé started college determined to major in chemical engineering. She was intrigued by the versatility of the field and the relevance of the career, but most importantly by the ability to use this career to solve problems.

Shortly after starting at LSC-North Harris, Chloé became an active participant in the Women In STEM Education (WISE) Institute and presented at the annual Women in STEM Conference last February, an opportunity she recalls as her most rewarding experience as a Lone Star College student. In 2012, this physics and calculus enthusiast also earned the opportunity to participate in a summer internship as part of a cancer research team at Iowa State University.

Chloé saw the importance of networking and developing relationships outside of the classroom. Her recommendation to aspiring students is to “get involved, meet people, give a helping hand, never procrastinate and take school seriously.”

Chloé has hopes of graduating with a BS in Chemical Engineering in 2015.

Campus Locations

Lone Star College North Harris

HSI/STEM Program

For more information, please visit the LSC-North Harris Web site at LoneStar.edu/NorthHarris

LSC-North Harris
2700 W.W. Thorne Drive
Houston, Texas 77073
281.618.5400

LSC-Greenspoint Center
250 N. Sam Houston Parkway E.
Houston, Texas 77060
281.260.3500

LSC-Victory Center
4141 Victory Drive
Houston, Texas 77088
281.810.5602

Health Professions Building
17200 and 17202 Red Oak
Houston, Texas 77090
281.943.6900