On behalf of Lone Star College-North Harris and the HSI/STEM staff, I’d like to welcome all of you to a new spring semester. Those of you who are familiar with the STEM grant know that we are constantly finding ways to serve our students, while others may have just seen our signs throughout the campus.

STEM degrees (science, technology, engineering, and math) are in high demand among area employers and offer high salaries, yet many of our students decide against pursuing a STEM career because they are afraid of math. The HSI/STEM Math Success Grant is here to create opportunities and initiatives for the continued success of all our students in their math classes and to assist them in their goal of pursuing a STEM degree in a four-year university.

With the help of HSI/STEM Math Success grant, math faculty have developed new, interesting, technology-based methodologies to teach math courses in ways that address the different learning styles of our students. The Math Achievement Center – or MAC – opened its doors last fall and offers students the opportunity to receive one-on-one tutoring in their math courses. In addition, the Women in STEM Education Institute (WISE) is a very active program designed to mentor and encourage female students who are interested in pursuing a STEM degree.

As you begin a new semester, I encourage you to take advantage of the math courses, math tutoring, and semester-long activities that are planned for this spring semester. Stop by our office in Winship 166, or call us at 281.618.5415 if you have questions.

I wish you a successful semester.

Sylvia M. Martinez
Director, HSI/STEM Grant
The math department’s newest faculty member is My Le. Le accepted the position of assistant professor after finishing a master’s in math from the University of Houston in December 2011.

Despite her new role, My Le is familiar with LSC-North Harris. She has been an adjunct professor with the math department since 2009. In addition, she was also an LSC-North Harris student here before transferring to the University of Houston where she received bachelor’s degree in math.

Her long association with the college made teaching here a logical choice for her. She also taught one of the first pilots with the HSI/STEM grant. Her students describe her as friendly, passionate about teaching and fun. When not in class, Le enjoys knitting and cooking, and she cites trigonometry as one of her favorite subjects.

Join us in welcoming My Le to the LSC-North Harris math department faculty.

Math Success

The “Math Success” HSI/STEM grant assists with improving developmental students’ progress into college-level coursework and college-level math students’ graduation and transfer through contextual, collaborative, and interactive learning techniques. Statistically, we know that mathematics is the first step to success in the science, technology, engineering, or math careers. We are seeking to make the study of mathematics engaging, meaningful, and a critical step toward our students’ success.

Math Achievement Center

The smartest math students are the ones that take advantage of tutoring, and the LSC-North Harris math faculty have long had a dream to make tutoring more readily available to everyone. The dream has finally come true with the 2012 opening of the Math Achievement Center – more commonly known as the MAC.

Directly across the hall from the math department offices, in the Winship Building, the MAC is dedicated to student success. The largest part of the MAC is an open tutoring area where students can find assistance with any math topic. Many of your math instructors make themselves available in there as well.

Technology is also a big part of the MAC - 12 desktop computers (with all software used by the math department), interactive projectors, wireless access points and tables with power and data connections. Soon, we hope to have laptops and iPads available for check-out to students visiting the MAC.

Whether you are coming to visit a tutor, with a group to use one of the study rooms, or with your instructor to have a review session in the conference room, we want to see you in there. Come by and let’s improve your math skills!

Events:

STEM Rally February 4, 11:30 a.m. - 1 p.m. Courtyard at LSC-North Harris

STEM Rally February 6, 11:30 a.m. - 1 p.m. The Commons at LSC-Greenspoint Center

STEM Rally February 7, 11:30 a.m. - 1 p.m. Foyer at LSC-Victory Center

STEM and Aftermath PIE Day March 21, 11:30 a.m. - 1 p.m. Courtyard at LSC-North Harris

STEM Career Workshop April 5, 9:00 am to noon Academic 126 at LSC-North Harris

0310 Math Review Session April 27, 10:30 a.m. - 2 p.m. Winship 154 at LSC-North Harris

0310 Math Review, Final Chance May 4, 10:30 a.m. - 2 p.m. Winship 154 at LSC-North Harris

1314 Math Review Session April 27, 10:30 a.m. - 2 p.m. Winship 152 at LSC-North Harris

1314 Math Review, Final Chance May 4, 10:30 a.m. - 2 p.m. Winship 152 at LSC-North Harris

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Women in STEM Education Institute

The Women in STEM Education Institute focuses on increasing Science, Technology, Engineering, and Math (STEM) participation and success for female students through a mentoring program with Lone Star College-North Harris faculty, University of Houston faculty, University of Houston upper-division and graduate students, and local industry STEM professionals from companies such as St. Luke Hospitals, Shell Oil Refinery, Exxon Mobil, Lubrizol and more.

“I had never heard of STEM before and I’m really glad Ms. Moss asked me to come to the open meeting. They gave me a mentor who has helped a lot and gives good advice. STEM is a wonderful program because it gives special attention to you personally. Everyone is very helpful and friendly. I would recommend anyone to become a part of an incredible program that cares about your future.”

-Meggie Reynoso

During Fall 2012 the Institute conducted the following activities:

- “Meet and Greet” Roundtable Mentor/Mentee Discussion
- The University of Texas MD Anderson Cancer Center School of Health Professions provided information about careers in health care, including a scientific demonstration on face mask and vac-lok for radiation therapy.
- The Women in STEM Education Institute Transfer Day mentees got acquainted with the Transfer Center staff and learned how the center can be valuable in transitioning to a four-year institution, including links and resources that mentees can utilize as early as their first semester.
- Personal Growth “Making a Difference” Workshop Mentees interacted with mentors and HSI/STEM staff to build self-esteem and self-confidence to help students rise to the top of their classes as they are approaching the end of the semester and the holiday season.

Women in STEM Education

Scheduled Women in STEM Activities:

- **College Success**
  - February 12, Noon-1:00 pm
  - Academic 126 at LSC-North Harris

- **College Success**
  - February 19, 11:30 am-12:30 pm
  - Room 305 at LSC-Greenspoint

- **University of Texas at MD Anderson**
  - February 20, 11:45 am-12:45 pm
  - Room 102 at LSC-Victory

- **Money Management**
  - March 19, Noon-1:00 pm
  - Academic 126 at LSC-North Harris

- **Closing Celebration, Rise to the Top!**
  - April 16, Noon-1:30 pm
  - Academic 126 at LSC-North Harris

- **Closing Celebration, Rise to the Top!**
  - April 23, 11:30 am-12:30 pm
  - Room 305 at LSC-Greenspoint

- **Closing Celebration, Rise to the Top!**
  - April 24, 11:45 am-12:45 pm
  - Room 102 at LSC-Victory

LoneStar.edu/STEM
The HSI/STEM grant supports the math department’s goal of continuous improvement of courses taught at LSC-North Harris. As part of this effort, the math department began developing pilots over the summer for the 0310 and 1314 classes. Each pilot uniquely delivers the content necessary to allow our students continued success in their academic careers.

Thanks to the HSI/STEM grant, the math department introduced seven pilots during the fall semester. More than two hundred students have registered in the pilot classes. Some pilots have a flipped structure, some model the corresponding UH class, and some use new software to aid in teaching the class.

One course called Dynamic Math allows students a flexible schedule and to receive one-on-one instruction. These pilots and others will be available in the fall of 2013, along with new pilots, like a flipped 2412 class and an online 1316.

If you would like to learn more about upcoming pilot courses and other STEM events, visit the STEM department at LSC-North Harris in Winship 166.

In an effort to revise and improve the laboratory exercises in the biology II course for non-majors, several new lab exercises based on computer simulation programs have been integrated into the curriculum by LSC-North Harris Professor Kara Barbee.

The computer programs, created by a company called SimBio, demonstrate concepts that would otherwise require long periods of time to progress, such as natural selection, population growth, and interspecies competition. By typing in specific parameters and then hitting the “GO” button, students can see trends occur in seconds or minutes, instead of years as would be required with a living model.

These computer simulation programs are especially important in a community college setting, due to the many time and resource restrictions that make a year-long research project unfeasible.

Student feedback has been very positive in that the computer programs are extremely effective in helping them grasp the concept. These computer simulation programs not only increase the knowledge and awareness of the natural world in students, but they also integrate traditional teaching with the latest technology.