

## PROGRAM GOALS

1. Improve ELL students access to science content by enhancing science content knowledge of ELL teachers.
2. Improve teacher content knowledge of both science and pedagogy needed to teach students from diverse language backgrounds.
3. Shift science instruction away from teacher centered methods to more student centered inquiry instruction.
4. Improve capacity for using effective co-teaching models. Mentor teachers in working cooperatively, and provide them with practice time to model co-teaching methods between science and ELL teachers.



## TIMELINE DETAILS

Spring 2009 — Rolling Application Process. Applications can be made electronically via: [www.luc.edu/cse/programs/westernunion.shtml](http://www.luc.edu/cse/programs/westernunion.shtml)

Applications will be considered on a rolling basis. Capacity is limited so please apply early.

Fall 2009 — Coursework and professional development sessions will be held on Tuesday evenings, 5-8:30 p.m., beginning the week of September 14, 2009.

Spring 2010 — Coursework and professional development sessions will resume on Tuesday evening, 5-8:30 p.m., during the week of January 25, 2009.

### CENTER FOR SCIENCE AND MATH EDUCATION

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## SCIENCE INSTRUCTION ENRICHMENT FOR TEACHERS OF ELL STUDENTS



LOYOLA  
UNIVERSITY  
CHICAGO

*Preparing people to lead extraordinary lives*

## PROGRAM DESCRIPTION

With the support of the Western Union Foundation, the Center for Science and Math Education is providing a one-year program to build capacity of teachers of ELL students in science content knowledge and inquiry-based instructional approaches. The cohort will consist of teams of two teachers from each participating school who support ELL students learning of high school science.

This unique program seeks to create opportunities for both science content teachers and ELL teachers to mentor each other in learning science content and developing effective strategies for ELL instruction. These teachers will then be able to further contribute to the community of teachers and learners assisting diverse populations of students at their school.

Teachers will take one content based graduate level course in essential science content and skills. This coursework will be supported by a program of professional development focused on constructing differentiated learning environments for ELL students with high quality science curricular materials. The content based course and professional development, combining content rigor with modern approaches to pedagogy, have been designed by the science professionals and educational specialists of CSME to fit the needs of teachers.

Teachers will earn 3 hours of graduate credit and receive a stipend (up to \$1500) for participation in 36 hours of professional development.

Schools will receive the benefit of enhanced skill sets within their professional community of learners.



## PROFESSIONAL

## DEVELOPMENT

The professional development program will include several areas specific to the needs of ELL students: **inquiry based science teaching** - teachers act as facilitators of knowledge, rather than fountains of knowledge, and guide students to ask testable questions while ensuring they have room to discover; **literacy strategies** - a specialist will provide training and mentoring to the teachers in the program on ways to adapt their teaching methods to make science more accessible to students; **co-teaching models** - teacher pairings will examine effective techniques for sharing classroom science instruction; and **cohort mentoring** - teachers will prepare and present short lessons in science to colleagues who will provide feedback in support of student learning.