Proposal # 691

Instructionally Related Activities Report Form

SPONSOR: SELENNE BAÑUELOS DEPARTMENT: MATHEMATICS

ACTIVITY TITLE: Mathematics Undergraduate Seminar

DATE (S) OF ACTIVITY: EVERY WEDNESDAY DURING SPRING 2015 SEMESTER

Please submit via email to the IRA Coordinator along with any supporting documentation at david.daniels@csuci.edu within 30 days after the activity. Thank you for your commitment to engaging our students!

A. ADDRESS THE FOLLOWING QUESTIONS:

- (1) PROVIDE A DESCRIPTION OF THE ACTIVITY;
- (2) HOW DID THE ACTIVITY RELATE TO A COURSE(S) AND/OR LEARNING OBJECTIVES?
- (3) WHAT DO YOU SEE AS THE STRENGTHS OF THE ACTIVITY?
- (4) What would you say are/were the activity's weaknesses?
- (5) HOW WOULD YOU IMPROVE THIS ACTIVITY FOR NEXT TIME?
- (6) WHAT DID YOU LEARN FROM THE PROCESS?
- (7) WHAT ARE STUDENT RESPONSES TO THE ACTIVITY? ATTACH STUDENT EVALUATIONS OR ASSESSMENTS (IN ACCORDANCE WITH FERPA RESTRICTIONS YOU MUST REMOVE ALL PERSONALLY IDENTIFIABLE STUDENT INFORMATION)
- 8) GIVE A SUMMARY OF EXPENSES FOR THE ACTIVITY.

B. ATTENDEE LIST- SUPPORTING DOCUMENT:

In addition to the report form, *in a separate document*, attach to your email a list of attendees complete with each student major and grade level. This for IRA Committee reference only and will not be published on the IRA website. Include your name and the title of your IRA activity on the document.

C.IMAGES FROM ACTIVITY:

Finally, attach to your email up to 6 images demonstrating student participation (under 2 MB total) with captions/titles. Please attach these photos in .JPEG format directly to email. Thank you!



(1) PROVIDE A DESCRIPTION OF THE ACTIVITY:

The Mathematics Seminar consisted of a weekly series during the Spring 2015 semester of invited lectures on contemporary mathematics and applications of mathematics to other areas of study and life. Presenters included CSUCI students and faculty as well as four invited speakers. Topics included mathematics education, mathematics research, and interdisciplinary applications of mathematics, like biological and ecological mathematical modeling. On days when we did not have an invited speaker each student presented on a historical female mathematician.

(2) HOW DID THE ACTIVITY RELATE TO A COURSE(S) AND/OR LEARNING OBJECTIVES?

Students enrolled in Math 499 were required to attend the weekly seminars. However, all CI students were invited to attend. For example, for the presentation titled *Twenty First Century Learners* given by Veronica Solorzano, the assistant director of UPS, students enrolled in Math 308 – Modern Math for Elementary Teachers - attended. Also, students with an interest in probability, statistics, or political science attended Dr. Geoffrey Buhl's talk titled *From the White Elephant Game to Congressional Committee Assignments: Valuing Traded Goods.* Our largest seminar event this past semester consisted of about 70 students from different STEM disciplines for the *Si, Se Puede: Four Latina Recent Math PhDs share their journeys* event where the speakers discussed their research in organized presentations and students asked questions about graduate school during the panel discussion.

(3) WHAT DO YOU SEE AS THE STRENGTHS OF THE ACTIVITY?

The Mathematics Seminar gives our students the opportunity to see math at work. There is a good portion of our enrolled undergraduates that are interested in high school teaching. While we make sure to bring in speakers that discuss mathematics education, we also want them to consider different options. We do so by exposing them to the careers in mathematical research, academia, and industry via our speakers. Our students have the opportunity to follow up with the speakers if they wish, thus widening their network.

Another strength of the mathematics seminar is that we give our students the responsibility of hosting our speakers. The Math 499 class is divided in 8 teams: Contact & Confirm, Advertisement, Parking, Research & Introduction, Set-Up, Thank You Letter, Management, and Snacks. The duties of each team is described on our website. The teams are rotated each week so that the students experience the different responsibilities. Furthermore, our students acquire great leadership and teamwork skills while performing the tasks.



(4) What would you say are/were the activity's weaknesses?

I wish I had done a better job of documenting the success of our seminar – e.g. taking pictures.

(5) HOW WOULD YOU IMPROVE THIS ACTIVITY FOR NEXT TIME?

I am interested in bringing in more speakers that hold jobs outside of academia.

(6) WHAT DID YOU LEARN FROM THE PROCESS?

Students enjoy listening to a person's academic and career trajectory as well as what they do now. They also enjoyed their small projects and presentations on historical female mathematicians.

(7) WHAT ARE STUDENT RESPONSES TO THE ACTIVITY? ATTACH STUDENT EVALUATIONS OR ASSESSMENTS (IN ACCORDANCE WITH FERPA RESTRICTIONS YOU MUST REMOVE ALL PERSONALLY IDENTIFIABLE STUDENT INFORMATION)

Some student comments received post- Si Se Puede event:

- Although I am not a math major. I am a woman of a stem major. I felt so uplifted and
 inspired after hearing the stories. In my transition from a nurse to a physician, I have been
 discouraged many times by others, even other nurses and doctors. It made for a lonely
 journey at times until I met some great faculty at CI.
- I found the topics you four hit upon very interesting and relatable. It also inspired further open dialogue among students and faculty over the course of the following week. I also appreciated the message of surrounding yourself with a strong network of colleagues, as to ensure a support system which can relate to us. You four were/are inspirational!
- Everyone (not just latino/as) should have attended. I expected the event to be more "struggle" oriented but I received A LOT of useful information regarding graduate school and dealing with inter-personal conflicts.
- We should have more of these events! Further, the one-on-one relationships I have built with some of my instructors, and my advisor is very precious to me. I hope with the growing CI, this be maintained.
- I thought their energy was amazing and their honest opinions on struggles they dealt with were insightful.

Some comments about the seminar/colloquium:

• I really liked how you gave each group a job to do when we had a speaker. I had no idea you had to do so many things when you want to bring in a guest speaker.



- ...I enjoyed the presentation that the students were required to give. We were exposed to the works of historical mathematicians, and that really was a valuable topic that tended to get overlooked throughout my studies.
- 8) GIVE A SUMMARY OF EXPENSES FOR THE ACTIVITY.

Amounts for Honorarium and Travel by name:

Veronica M. Solorzano: \$150
Jon T Lo Kim Lin: \$150
Dr. Alona Kryshchenko: \$150
Dr. Nathan A. Carlson: \$200
Caroline C. Williams: \$600

B. ON SEPARATE DOCUMENT, PLEASE ATTACH ATTENDEE LIST (PERSONALLY IDENTIFIABLE INFO REMOVED)

C. PLEASE INCLUDE UP TO 6 IMAGES AS ATTACHMENTS TO YOUR EMAIL SUBMISSION