



<http://www.csuci.edu/ira/index.htm>

**Application**  
**Instructionally Related Activities Funds Request**  
**2009-2010 Academic Year**  
**DEADLINE: Fall and Academic Year 3/13/08**  
**Spring 10/15/08**

Applications must first be sent to the appropriate program chair. Chairs will then recommend and route them to the Dean's Office for review and authorization. The Dean's Office will then forward them to the IRA Committee for consideration.

**Activity Title: GEOMETRY WORKSHOP in MEXICO**

Project Sponsor/Staff: Ivona Grzegorzczuk Support Personnel: Nitzia Castaniero, x8815  
Activity/Event Date(s): 20-27 September 2009  
Date Funding Needed By: May'09

**Please check if any of the following apply to your IRA:**

- |   |   |
|---|---|
| <input type="checkbox"/> Equipment Purchase     | <input type="checkbox"/> Field Trip   |
| <input type="checkbox"/> Event                  | <input type="checkbox"/> Participant data collection for public               |
| <input type="checkbox"/> IT Requirements        | dissemination, i.e. interviews/surveys that                                   |
| <input type="checkbox"/> International Travel   | result is a journal/poster session/newsletter                                 |
| <input type="checkbox"/> Space/OPC Requirements | <input type="checkbox"/> Risk Management Consultation                         |
| <input type="checkbox"/> Infrastructure/Remodel | <input type="checkbox"/> Late Submission (Passed Deadlines: <b>Fall 3/14,</b> |
| X Other <u>math workshop</u>                    | <b>Spring 10/15)</b>  |

Previously Funded: no Request # 0180

Does your proposal require IRB (Institutional Review Board) approval: No

Assessment submitted for previously Funded Activity:

Academic Program or Center Name and Budget Code: Mathematics, 750

Date of Submission: March 13, 2009

Amount Requested: **\$3500**

(Should match item 2. E. on page 4)

Estimated Number of Students Participating: 5 + 200 at the seminar presentations.

## **Application**

### **Instructionally Related Activities Funds Request** **2009-2010 Academic Year**

#### **Conditions and Considerations**

**Equipment Purchase**-If requesting large equipment, Project Sponsor must show proof of correspondence with OPC Administration. In addition, all other purchases must follow Procurement Guidelines

**Events**-Attach copy of Events and Facilities Use Request Form (Public Folders-Events & Facilities folder) Consider time frame for set-up and take down.

**Participant Data Collection for Public Dissemination**-If Project Sponsor proposes to conduct research with human participants then it may be subject to IRB (Institutional Review Board for the Protection of Human Subjects) review. It is the Project Sponsor's responsibility to inquire with the IRB **prior** to IRA application submission to determine if the project is exempt from IRB review so that funding is not delayed. Please indicate on the cover page if your project is exempt from IRB review.

**Field Trip**-If approved, Identified Risks of Participation and Release Agreement must be submitted for each student to the Program Office (Public Folders-HR Forms).

**IT Requirements**-Requires proof of correspondence and approval from IT Administration

**International Travel**-Requires International Travel application be submitted to Center for International Affairs.

**Risk Management Consultation**-Requires proof of correspondence with Risk Management.

**Space/OPC Requirements, Infrastructure/Remodel**-Requires proof of correspondence with OPC Administration.

**Late Submission (Deadlines: Fall 3/14, Spring 10/15)**-Requires explanation for emergency funding.

**Fiscal Management:** Project Sponsor's program will be responsible for all costs incurred over and above what is funded through the IRA award and will be responsible for seeing that any revenue that is intended to offset the amount of the IRA award is transferred accordingly.

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**Requirements and Signatures**

Please provide the following in your application:

1. **Brief Activity Description.** Describe the activity and its relationship to the educational objectives of the students' program or major.

The aim of this project is to support five CSUCI students to attend an introductory international school in algebraic geometry (for undergraduate and undergraduate students), 20-25 of September 2009 at the University of Michocacan in Morelia, Mexico. The school will be followed by a workshop summarizing current knowledge in various areas of algebraic geometry and its applications, 26-27 of September 2009. The NSF and Michocacan University will sponsor the event.

The themes of the school will focus mainly on introducing some necessary concepts and notions of algebraic geometry that are the basis for current research and applications, such as the theory of schemes, the theory of curves and surfaces, the vector bundles and moduli, and applications of algebraic geometry, such as cryptography, computer graphics and Gromov-Witten theory. There will be 6 theoretical courses aimed towards undergraduate and graduate students. Also there will be some problem solving and discussion sessions. Over the five days of the school, students will be taught by faculty recognized for good teaching and specializing in the area of the course. The lectures and discussions during the two-day workshop will be on recent results and research problems in algebraic geometry and will be accessible to the participants of the school. We hope to start new international collaborations.

The conference will have international scientific and academic impact as algebraic geometry and its applications are currently in the center of mathematical research, at it would be beneficial to our students to get the broader perspective on sciences. All students participating in the project will give presentations latter in the academic year to the wider CSUCI community, impacting ca 200-300 other CSUCI students. The overall goal is to increase the number the CSUCI students going to graduate programs in STEM disciplines. Special efforts will be made to attract talented minority students and female students.

2. **Relation to IRA to Course Offerings.** All IRAs must be integrally related to the formal instructional offerings of the University and must be associated with scheduled credit courses. Please list all classes that related to the program proposed.

Students taking upper division mathematics (such as MATH 499, 393, 484, 494, 482, 497, 240), computer science and physics courses are the primary beneficiaries of these funds. However, other students with interest in mathematics and in the applications of mathematics to other fields (such as sciences) will be invited to participate.

**Activity Assessment.** Describe the assessment process and measures that the program will use to determine if it has attained its educational goals. **Please note a report will be due at the end of the semester.**

All students will present at seminars after returning from the workshop. They would be involved in research projects, will present their work at the university, community and national conferences.

**Activity Budget.** Please enclose a complete detailed budget of the entire Activity **bold** specific items of requested IRA funding. (Page 4)

**Travel and logging**                      **5 students x \$700 = \$ 3500**

Food, materials, incidentals        5 students x \$200 = \$ 1000

**TOTAL REQUESTED =                      \$3500**

**Sources of Activity Support.** Please list the other sources of funding, and additional support for the activity.

There is pending support from Consejo Nacional de Ciencia y Tecnologia for Mexican food and local activities for participants.

7. **Acknowledgment.** Project Sponsor and Program Chair acknowledge that they have reviewed and accepted the Conditions and Considerations detailed on page 2.

Signatures and Dates

WONA GRZEGORCZYK                      3/13/09  
Project Sponsor                                      Date

[Signature]                                      3/13/09  
Program Chair/Director                                      Date

A. H. [Signature]                                      4/23/09  
Dean

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ACTIVITY BUDGET FOR 2009-2010

1. Operating Expense Budget

A. Supplies	
B. Vendor Printing	
C. In-State Travel	
D. Out-of-State Travel	<u>approximately \$3500</u>
E. Equipment Rental	<u>none</u>
F. Equipment Purchase	<u>none</u>
G. Contracts/Independent Contractors	<u>none</u>
H. Honorarium	
I. OPC Chargeback	<u>none</u>
J. Copier Chargeback	<u>*allocated from program budget (~\$150)</u>
K. Other (Please Specify)	
 TOTAL	 <u>\$3500</u>

2. Revenue

A. Course Fees	<u>not applicable</u>
B. Ticket Sales	
C. Out of Pocket Student Fees (exclusive of course fees)	Additional Sources of
Funding	
(Please specify	
And indicate source)	<u>cost-sharing (see note below)</u>
<b>Requested Allocation</b>	<b><u>\$ 3500</u></b>
<b>from IRA</b>	

Total Revenue