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

Application
Instructionally Related Activities Funds Request
2010-2011 Academic Year
DEADLINE: Fall and Academic Year 3/31/10
Spring TBD

Applications must first be sent to the appropriate program chair. Chairs will 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:
Project Sponsor/Staff (Name/Phone):
Activity/Event Date(s):
March 18 - March 27, 2011
Date Funding Needed By:
**Please Note that for Fall Requests the earliest that you will be notified of funding availability will be early June 2010 and for Spring Requests early January 2011.

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

☐ Equipment Purchase
☐ Event
☐ IT Requirements
☒ International Travel
☐ Space/OPC Requirements
☐ Infrastructure/Remodel
☐ Other __________

Previously Funded: ☒ YES ☐ NO
Yes, Request # __________

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

Assessment submitted for previously Funded Activity: ☒ YES ☐ NO

Academic Program or Center Name and Budget Code:
MATHEMATICS 750

Date of Submission: March 10, 2010

Amount Requested:
(Should match item 2. E. on page 4)

Estimated Number of Students Participating: 15
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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.

DONE _ APPROVED in SPRING 2010

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

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

Late Submission - 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.

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 relate to the program proposed.

3. **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.

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

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

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

Signatures and Dates

Project Sponsor

[Signature]

[10/22/10]

Program Chair/Director

[Signature]

[10/22/10]

Dean of the Faculty

[Signature]

[10/26/10]
**Application**  
**Instructionally Related Activities Funds Request**  
**2010-2011 Academic Year**

**ACTIVITY BUDGET FOR 2010-2011**

1. Operating Expense Budget  
   A. Supplies  
   B. Vendor Printing  
   C. In-State Travel  
   D. Out-of-State Travel  
   E. Equipment Rental  
   F. Equipment Purchase  
   G. Contracts/Independent Contractors  
   H. Honorarium  
   I. OPC Chargeback  
   J. Copier Chargeback  
   K. Other (Please Specify)  

   TOTAL Expenses  

   $750  
   $24500  
   $1500 for museums/exhibitions
   
   $36750

2. Revenue  
   A. Course Fees  
   B. Ticket Sales  
   C. Out of Pocket Student Fees (exclusive of course fees)  
   D. Additional Sources of funding (Please specify And indicate source)

   Total Revenue  

   $750 per student?

   66% of cost? cost - $750/
   per student?
UNIV 392 INTERNATIONAL EXPERIENCE COURSE PROPOSAL
California State University Channel Islands

Course Name & Number: UNIV 392/Math 497: Mathematics, Science, Architecture, Music, Art and Culture - Italy

Instructors: Dr. Jesse Elliott (Mathematics) and Dr. Ivona Grzegorczyk (Mathematics)

Country & Dates of Trip: Italy, March 18 to March 27, 2011

SYLLABUS

Course: UNIV 392/Math 497 Mathematics, Science, Architecture, Music, Art and Culture - Italy

Description: This multicultural and interdisciplinary course combines the STEM disciplines with architecture, art, music, and culture of Italy. This course will give students an invaluable exposure to major historical accomplishments in engineering, architecture, art, and music, providing them with practical and historical knowledge of the interdisciplinary applications of mathematics and science. The course has no prerequisites and invites all students to apply. Students will be selected by the instructors through an application process on the basis of the students’ maturity and dependability, their interest in mathematics, science, architecture, music, and art, and on recommendation letters.

The connections between mathematics, science, architecture, music, and art are very deep and strong and span many cultures and historical times. Italy is the historical birthplace of modern mathematics and engineering and of many related arts such as tilings and baroque music. It is the location of many famous museums and spectacular architecture, such as the Brunelleschi’s Duomo in Florence and Saint Peter’s square in Rome. Our travel will begin in Rome, where we will be hosted by the faculty and students of Università degli Studi Roma Tre, followed by an expedition to Florence. The program includes discussions, presentations and exhibitions of mathematics-related engineering, music, and art pieces and underlying mathematical problems. The program has a very interdisciplinary approach, as representatives from many fields are invited to attend. It also has strong cultural, artistic and scientific value and is suitable for an undergraduate audience. Students will present projects and participate in various field trips. There will be class sessions prior to the trip during which we will discuss a) students’ presentations, b) history and culture of the region, and c) orientation for the trip. The students will present their projects in the mathematics seminar MATH 499 before the trip. There will also be one post-trip presentation for the entire university population with a poster and project session. This class is designed for CSUCI students and will be limited to 10 students.

Learning Objectives:

This is a unique course designed to enhance the interdisciplinary, multicultural, and international perspectives of the student and stimulate interest in applications of mathematics to art, music, architecture and engineering, as well as history and foreign cultures. Through this course students will learn to:
**Students with Special Needs:** Students with physical or learning disabilities are encouraged to contact student services (437-8510) for personal assistance.

**Grading:**
- Project preparation and presentation 20%
- Trip activities 55%
- Pre-Trip Activities 10%
- Post-trip Poster 15%

**Participation:** Students are expected to present a math project involving engineering, architecture, art, math, music, or culture project in Italy, to listen to other student’s projects and talks, to participate in discussions and artistic projects, and to attend excursions to art museums, music events, and excursions to architectural and cultural sites. The projects will be prepared prior to the trip under the supervision of the instructors. At the conference students will present their projects and attend other talks and exhibitions. They are.

**The Internet:** We will use e-mail, the math web site, and Blackboard to communicate.

**Course Outline:** This outline is tentative. Adjustments will be announced later.

**Mathematics, Engineering, Music, Art and Culture - Italy**

**Student Recruitment**
If approved, the course will be advertised in Fall 2010 and early Spring 2011 with fliers and e-mails. Students will fill out an application with the following information: faculty recommendation, GPA, mathematics and science courses, mathematics, science, and artistic interests, student contribution to the CSUCI STEM programs and/or the university, student projects and presentations. The best students will be selected for this trip by the instructors with interdisciplinary interests: Ivona Grzegorczyk (art and architecture), Jesse Elliott (music and history of Italy) under the CIA guidelines. Students selected will be expected to be majoring or minoring in a STEM discipline.

**Cost of Trip (per student and estimated total)**

The following are approximate costs of the event. At a 66% funding rate the projected cost for each student would be $750.

**Cost of Trip (15 students, estimated)**
- Air Fare (15 students) $22,500
- Transportation to and from LAX $750
- Local Transportation $1,500
- Accommodation (7 nights x 15 students) $4,500
- Meals (9 days x 15 students) $3,000
- Museum/exhibitions $1,500

**TOTAL REQUESTED** for 10 students $33,750

**Faculty Air Fare** 2 x $1,500 $3,000

**TOTAL REQUESTED** $36,750
Sponsoring Faculty Member: Jesse Elliott and Ivona Grzegorczyk

Units: MATHEMATICS and APPLIED PHYSICS

Location: BTW

Dates: March 18 to March 27, 2011

Reason for Location of Program:

The connections between mathematics, engineering, architecture, music, and art are very deep and are connected to various cultures and historical times. Italy is the birthplace of many famous engineers and artists, including Da Vinci, Brunescelli, and Michaelangelo, and the location of many famous museums and spectacular architecture, such as the Duomo in Florence. We will be hosted by the mathematics department at Università degli Studi Roma Tre (www.uniroma3.it), where J. Elliott is going to be attending a conference and giving a talk in May 2010, and the program of the course includes interactions with students and faculty there, including discussions, presentations and exhibitions of art pieces and underlying mathematical problems. The course has a very interdisciplinary approach and strong cultural, artistic, and scientific value and is ideal for an undergraduate audience. This proposal is to support and enhance our students’ multicultural, international, and interdisciplinary experiences with an international experience overseas, which many of our students could not afford without partial funding, as well as trips to museums and cultural events. This project, if funded, would support the university mission of facilitating learning within and across disciplines through integrative approaches, and graduating students with multicultural and international perspectives. It would also give a chance for students to work in an international community of mathematicians, scientists, artists, and musicians.

Academic goals and learning outcomes for students:
• Student exposure to and interaction with foreign cultures and languages
• Study of international engineering and artistic marvels
• Student presentations and discussions with international students and faculty
• Cultural cooperation, learning and exchange of ideas
• Participation in multicultural events and artistic events
• Discussions of modern mathematical and/or scientific ideas and problems
• Engagement with the scientific method for applications and proofs
• Exposure to Italian culture and perspectives on modern art, science and technology

Course Requirements (or attach a draft syllabus for the Univ 392 course):

Assessment of Student Performance:

Student attendance at cultural events and excursions will be required. Students will give presentations on our campus and in Rome.

Students will be exposed to foreign culture and language will be able to participate in international cooperation. The course will enhance CSUCI faculty and students learning and research opportunities. Specific objectives to be met and assessed in the course are listed below:

• Student projects and presentations involving one or more STEM discipline and one or more of engineering/architecture/art/music
• Cooperation, learning and exchange of culture and ideas
• Attendance at multicultural and artistic events and locations
• Discussions of modern mathematical and/or scientific issues and problems of interest to the world
• Applications of the scientific method and/or mathematical proofs
• Learning of Italian culture and perspectives

Do the dates of the program conflict with regular classes/faculty workdays? No

Have you offered this program before? Yes (related programs in Poland and in the Netherlands).
Budget

__ State-side funding

__ Extended Education (special session, self-support)

__ Request for special Center funding? Amount: __________

Expenses:

- Faculty Compensation
- Benefits
- Travel for Faculty: $3,000
- Accommodations for Faculty: $1,000
- Meals for Faculty: $800
- Insurance for Faculty
- Printing/Copying
- Other
- Total Expenses: $4,800

Estimated Student Course Fee: $600 x 15 = 9,000
Estimated Student Travel Expenses: $2,250 x 15 = $33,750

____ Approved
____ Denied
Reason:

Signatures

Director of Center

Dean of Faculty

Dean of Extended Education
(if special session)

Provost

President