

Activity Title:

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

Application <u>Instructionally Related Activities Funds Request</u> 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 the 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.

	: Meximum, s, Science, Architecture March 27,2011 he earliest that you will be notified of funding and for Spring Requests early January 2011.	Music, Ard, and Culture - Italy		
Please check if any of the following of Equipment Purchase Event IT Requirements X International Travel Space/OPC Requirements Infrastructure/Remodel Other	apply to your IRA: **XField Trip** Description Participant data collection for public dissemination, i.e. interviews/surveys that result is a journal/poster session/newsletter Risk Management Consultation Late Submission			
Previously Funded: MYES XNO	Yes, Request #			
Does your proposal require IRB (Institutional Review Board) approval: □Yes ▼No				
Assessment submitted for previously Funded Activity: X YESNO				
Academic Program or Center Name and Budget Code: MATHEMATHICS 750				
Date of Submission: March 10, 2010				
Amount Requested: (Should match item 2. E. on page 4)				
Estimated Number of Students Participating: 15				

Application Instructionally Related Activities Funds Request 2010-2011 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 <u>prior</u> 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:

Signatures and Dates

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

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	\$750
D. Out-of-State Travel	\$34500
E. Equipment Rental	
F. Equipment Purchase	
G. Contracts/Independent Contract	ors
H. Honorarium	
I. OPC Chargeback	
J. Copier Chargeback	
K. Other (Please Specify)	\$ 1560 For museums/exhibitions
TOTAL Expenses	\$36,750
2. Revenue	
A. Course Fees B. Ticket Sales	? / \$750 per student?
C. Out of Pocket Student Fees	2/45
(exclusive of course fees)	() \$180 per student!
D. Additional Sources of funding	
(Please specify	
And indicate source)	
Total Revenue	
	(10) 0 17
E. Total Requested from IRA	66% of cost? cost - 3

Form IA-1

UNIV 392 INTERNATIONAL EXPERIENCE COURSE PROPOSAL California State University Channel Islands

Course Name & Number:

UNIV 392/Math497: 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 though an application process on the basis of the students' maturity and dependability, on 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 Bruneschelli'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

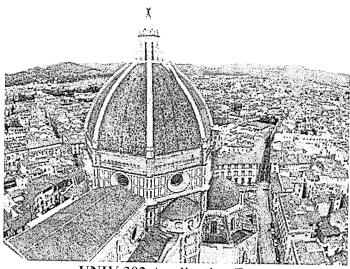
Student Recruitment

If approved, the course will be advertised in Fall 2010 and early Spring 2011 with fliers and emails. 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 st	udents, estimated)		
Air Fare (15 studen	\$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	



UNIV 392 Application Form

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, Bruneschelli, 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 faculy
- 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, sel	f-support)	
Request for special Center fu	ınding? Am	ount:	
Expenses: Faculty Compensation Benefits Travel for Faculty Accommodations for Faculty Meals for Faculty Insurance for Faculty Printing/Copying Other Total Expenses Estimated Student Course Fee: Estimated Student Travel Expenses:		From extended Ed	
Signatures			
Director of Center	Date		
Dean of Faculty	Date		
Dean of Extended Education (if special session)	Date		
Provost	Date		
President	Date		