

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

#### Application Instructionally Related Activities Funds Request 2008-2009 Academic Year DEADLINE: Fall and Academic Year 3/14/08 Spring 10/15/08

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.

# Activity Title: UNIV 392: Science and Technology in Japan

Project Sponsor/Staff (Name/Phone): Chemistry: Biology: Activity/Event Date(s): Spring 2009

Dr. Simone Aloisio (437-8999) Dr. Amy Denton (437-8458)

Date Funding Needed By: 11/30/2009

\*\*Please Note that for Fall Requests the earliest that you will be notified of funding availability will be early June 2008 and for Spring Requests early January 2009.

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

<ul> <li>IT Requirements</li> <li>International Travel</li> <li>Space/OPC Requirements</li> <li>Risk M</li> </ul>	<ul> <li>Field Trip</li> <li>Participant data collection for pub dissemination, i.e. interviews/survey result is a journal/poster session/new Aanagement Consultation</li> <li>Late Submission (Passed Deadlines Spring 10/15)</li> </ul>	vs that wsletter
Previously Funded: X YES ONO	Yes, Request # <b>_Fall 2008 (234)</b>	
Does your proposal require IRB (Institu	tional Review Board) approval: Yes	s <u>X</u> No
Assessment submitted for previously F	unded Activity: <u>X</u> YES INO	
Academic Program or Center Name	and Budget Code:	781
Date of Submission:		3/6/2009
Amount Requested: (Should match item 2. E. on page 4)		\$28700
Estimated Number of Students Particip	pating:	15

#### <u>Application</u> Instructionally Related Activities Funds Request 2008-2009 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.

**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.

#### Application Instructionally Related Activities Funds Request 2008-2009 Academic Year

# **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.

Science and Technology in Japan (UNIV 392) is a class approved by the Center for International Affairs and will be offered in Spring 2010. I believe this was the first UNIV 392 class to be offered and funded by IRA. This will be the third time this class is offered. This year, we are seeking funding to subsidize the cost of fifteen students who will be enrolled in this class. This year, we are also requesting funding to purchase carbon offsets for our air and train travel.

Science and Technology in Japan is a unique course designed to enhance the international perspective of students and stimulate interest in natural and life sciences. The class was developed with close counsel from the Center for International Affairs (CIA) and colleagues at Kyoto University. The course includes a field trip to Kyoto during the 2010 spring recess. The city was the ancient capital of Japan for over 1000 years (794-1868) and is rich with both historical and modern treasures. The historic monuments of Kyoto include spectacular temples, shrines, gardens, a castle, and several imperial palaces that are preserved in exceptional condition and considered national treasures. The Kyoto region (Kansai) is also modern, serving as corporate headquarters for companies such as Sharp, Matsushita (Panasonic), and Nintendo.

The course will include guest professor speakers from Kyoto University, giving the student a chance to experience topics from the Japanese perspective. Kyoto University is the second oldest in Japan and is home to seven Nobel laureates in the natural sciences. When the class was offered in 2008, we were able to have several Kyoto University give presentations and interact informally with the class. For example, Prof. Mori, an expert on earthquakes, worked in Los Angeles during the Northridge earthquake, and in Japan during the Hanshin Earthquake that devastated Kobe. In 2006 he was able to provide us with a really perspective of both earthquakes, which happened one year to the day apart; as well as discuss the topic scientifically. Prof. Imanishi, a horticultural scientist, discussed some of the oldest traditional gardens in Japan, including the Byodo-In (UNESCO World Heritage Site) temple garden, which we visited. He was able to relate the botany and architecture of these gardens to Japanese culture. He also took us on a nature walk to Simogamo Shrine (UNESCO World Heritage Site) and the Kyoto Botanical Gardens. Prof. Tochio, a molecular biologist, told us about cutting edge research using labeled yeast proteins and magnetic resonance imaging to visualize gene expression in living mammalian cells. He also explored the traditional Japanese uses of yeast in the fermentation of sake, which we were able to experience first-hand on a tour of a sake brewing warehouse. Finally, Prof. Kawasaki, an atmospheric chemist, discussed the role of greenhouse gases in global climate change.

While in Kyoto, there will typically be a morning classroom session followed by an afternoon and/or evening field trip, with an occasional day trip. All of the field trips will be linked to the case studies that will be the focus of the class. The case studies will enable

students to observe natural and man-made phenomenon, and the class will dissect these down to their basic scientific principles. The case studies chosen will be distinctively international in nature, and will depend somewhat on who the guest speakers will be. We will discuss climate change extensively since this is a global environmental issue that has many (interdisciplinary) perspectives which can be discussed and understood by a wide audience. Students will also have ample opportunity to interact with Japanese university students. This class is a rarity in that it is a science class abroad. It thoroughly supports the mission of CSUCI. The 2008 syllabus for the class follows as Appendix A.

If fully funded, the total cost for each student would be about \$1500 including their food and insurance expenses. This includes the costs of door-to-door travel, accommodations, local transport, and a day-trip to Hiroshima. Hiroshima is home to the Peace Memorial Park and Peace Museum. This site is at the hypocenter of where the first atomic bomb was detonated in combat. There is now a memorial park and museum dedicated to world peace at this spot. Some of the structures have been left undisturbed since the catastrophic event, which killed approximately 200,000 people. The visit to the Peace Museum was one of the most poignant parts of our last trip, and it definitely impacted the students. Hiroshima is the cultural, economic and governmental center of the Chūgoku region, and will provide a contrast to the Kansai region. The group will take the shinkansen ("Bullet Train") to Hiroshima, making the 250 mile trip in about an hour and a half one-way.

A fully funded trip would reduce the course fee to approximately \$900. About \$600 in out of pocket expenses (cash) would be expected from the students for things such as local bus and train fare, food, entrance fees to temples and museums, etc. Some of the cultural activities would also be included in the course fee (e.g. performing arts display). Kyoto is home to the best known temples in Japan, including Kiyomizu-dera, Kinkaku-ji, Ginkaku-ji and Ryoan-ji; as well as numerous shrines (which are free), a medieval Japanese Castle (Ni-jo), and most of the country's surviving imperial palaces. There is also a national museum in Kyoto, exhibiting art and archeological artifacts from the area. Traditional Japanese performing arts include Nō (Traditional Dance-Drama), Kabuki (Musical Performance), or Bunraku (Puppet Theater).

Enrollment in this course will follow UNIV 392 and Center for International Affairs guidelines. As was done on the previous class, all students will be notified about the class well beforehand, and students of any major will be accepted. Any further inquiries about the class are welcome. Thanks!

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.

The funds requested directly subsidize the travel portion of this UNIV 392 section.
 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.

There will be a poster session where each student will be responsible for making a presentation on a topic related to one of the topics examined on the trip. This will serve as a post-trip assessment. Students will also be surveyed before and after the trip. The IRA committee will be invited to the poster session. The assessment report from the previously funded trip is attached as Appendix B.

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

The following are approximate costs of the trip per student.

Costs Associated with Course F	-ee	
Roundtrip Airfare from LAX Accommodations (7 nigh Local Transportation Cultural Activities Instructor Travel Carbon Offset	ts) \$ 120 \$ 550 \$ 360 \$ 80 \$ 340 \$ 140	0 0 0 0
Other Costs (O. (	SUB-TOTAL: \$ 2670	
Other Costs (Out of Pocket)		
Meals (7 days) Travel Insurance Train/bus tickets (to get around) Cultural Activities	\$ 400 \$ 60 \$ 100	
IRA funding in	<u>\$ 100</u> SUB-TOTAL: \$ 660	

IRA funding is being requested to subsidize two-thirds of the total costs to the students (minus food and insurance), or \$1913.33 per student (\$28,700 total). Kyoto University has generously offered to pay for numerous direct and indirect costs, such as guest speakers, classroom space, and logistical help, and local native speakers. They will also arrange for a plant trip to see some of modern Japan's industrial and technological infrastructure. The 2006 trip was to the Osaka Steel Works, one of the largest steel factories in Japan. Kyoto University students will also be able to interact with CSUCI

5. Sources of Activity Support. Please list the other sources of funding, and additional

Course fee. Chemistry department CSUCI and Kyoto University will provide some

<u>Signatures and Dates</u>		
	•	
Project Sponsor	Simone Aloisio	3/5/9
mani	Cuts	Date
Project Sponsor	Amy Denton	05/05/09
Program Chair/Director		
	Simone Aloisio	<u>D</u> ate
Dean	Ashish Vaidya	316109
	and A didyd	Date

## Application Instructionally Related Activities Funds Request 2008-2009 Academic Year

# ACTIVITY BUDGET FOR 2008-2009

# 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 Contra	ctors
H. Honorarium	
I. OPC Chargeback	
J. Copier Chargeback	
K. Other (Please Specify)	
TOTAL Expenses	<u>\$49950 (see above)</u>
2. Revenue	
<ul> <li>A. Course Fees</li> <li>B. Ticket Sales</li> <li>C. Out of Pocket Student Fees (exclusive of course fees)</li> <li>D. Additional Sources of funding (Please specify And indicate source)</li> <li>E. Requested Allocation from IRA</li> </ul>	\$13500 \$7750 \$28700 (see above)
Total Revenue	\$49950

## Science and Technology in Japan **UNIV 392** Spring 2008

# Course

**Description:** This is a general science course that will be held primarily in Japan. We will look at four case studies and discuss them in terms from the natural and life science perspective. While in Japan, we will have guest professors from Kyoto University discussing topics from the Japanese perspective. We will spend most of our time in Kyoto Japan. The city was the ancient capital of Japan for over 1000 years (794-1868) and is rich with both historical and modern treasures. We will also make a trip to Hiroshima to visit the Peace Memorial Park and Peace Museum. Typically, there will be morning classroom sessions, then afternoon and/or evening field trips. We will be accompanied by our Japanese host students on the field trips. At CSUCI, we will have regular class once a week discussing some aspects of the case studies, as well as necessary details (orientation) for the trip before the class trip. We will also take a field trip to Little Tokyo, in Los Angeles. After the trip we will discuss the class project; and at the end of the semester, there will be a poster session where you will present your project. This class is designed for CSUCI students (sorry, no guests), and will be limited to 15 students.

Instructors:

Simone Aloisio 207 Science Building Phone: (805) 437-8999 E-Mail: simone.aloisio@csuci.edu

Amy Denton 210 Science Building Phone: (805)437-8458 E-Mail: amy.denton@csuci.edu

Prerequisites: Consent of instructor and CIA

# **Course Credit**

and Contact Hours: Students will receive 3-units of credit for this course. In addition to on-campus (CSUCI) meetings, we will be meeting in discussion sections in Japan, typically in the morning. We will then break and go on afternoon and/or evening field trips. Students can expect 10-16 contact hours per day on the trip. All activities and meetings are mandatory.

#### Science and Technology in Japan **UNIV 392** Spring 2008

l'ext:	Lonely Planet Guidebook – Japan 10 <sup>th</sup> Edition (2007)
Course Time:	Wednesday 7:00 PM – 9:50 PM.
Trip Dates:	Mar 14 <sup>th</sup> : We will meet on campus early in the morning Mar 23 <sup>rd</sup> : We will return sometime in the afternoon
Place:	Bell Tower 1491
Security and Health:	Japan is a stable, highly developed parliamentary democracy w modern economy. Tourist facilities are widely available. Crim well below the US national average. <b>However</b> , crime does exi and being careless can result in loss of property or worse. Med modern, abundant, and available in the places we will visit in Ja Travel insurance is required. Please note that some over-the-co prescription drugs ( <i>e.g.</i> Pseudoephedrine and Codeine) are proh

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with a me levels are ist in Japan dical care is lapan. ounter and will discuss this during orientation. The US State Department Consular hibited. We Information Sheet on Japan can be found at: http://travel.state.gov/travel/cis\_pa\_tw/cis/cis\_1148.html

## Learning

This is a unique course designed to enhance the international perspective **Objectives:** of the student and stimulate interest in natural and life sciences.

> This course is designed to provide the student with a basic knowledge of the following:

- The scientific method and how it is used to approach scientific 0 problems and view natural and anthropogenic phenomena
- Specific examples of global issues that natural and life science are ۲ central to
- Japanese culture and the Japanese perspective

## Students with

Special Needs: Students with physical or learning disabilities are encouraged to contact student services (437-8510) for personal assistance.

## Science and Technology in Japan UNIV 392 Spring 2008

Grading:	Participation Homework Quiz Final Poster/Project	30% 30% 10% 30%		
Participation	: All class activities, t showing up does not	will be normalized and include the +/- system. before, after, and during the trip are mandatory. Just get a student participation credit. The standard for ment. This includes being an active participant in		
	class discussion, doing the reading assignments on time and being on task during field trips. Being an engaged student is important to the learning process. Perhaps most importantly, it helps you remember what you learned long after the class has ended.			
Homework:	There will be homework assignments about every other week. The will consist mostly of short group presentations or writing assignments. You will be required to work in teams for this.			
Quizzes:	-	z based on all the material covered in the sessions trip. This should be no problem for students who s in the class.		
Poster or Project:	the topic. A poster is	topic related to a case study and present a poster on not the only possible project. We will have a post- s and ideas. The best projects will be synthetic, tive.		
Dishonesty:	CSUCI policy. Penal you dishonor yourself	academic dishonesty will be penalized according to ties can include failing the class. When you cheat, f and the whole class. This is probably the most you should not cheat.		
The Internet:	To access blackboard do not have one yet, p	eck regularly for updated information. , you must have a login name and password. If you please go to the Help Desk (IT computer lab) and get on blackboard can be accessed via		

## Instructional Related Activities Report Form

Sponsor	
	DEPARTMENT
Simone Aloisio	Chemistry/Center for International Affairs
ACTIVITY TITLE	DATE (S) OF ACTIVITY
UNIV 392: Science and Technology in Japan	Field Trip to Japan: Spring Break 2008

# PLEASE EXPLAIN (1) DESCRIPTION OF ACTIVITY; (2) HOW DID THE ACTIVITY RELATE TO A COURSE(S); AND (3) WHAT YOU LEARNED FROM THE PROCESS.

The activity was a field trip to Japan over Spring break 2008 (March 15<sup>th</sup>-23<sup>rd</sup>). The entire UNIV 392 class went to Kyoto, Japan. A brief summary of the activities is listed:

	Morning	Afternoon
Sunday (Mar 16 <sup>th</sup> ) Monday (Mar 17 <sup>th</sup> ) Tuesday (Mar 18 <sup>th</sup> ) Wednesday (Mar 19 <sup>th</sup> ) Thursday (Mar 20 <sup>th</sup> ) Friday (Mar 21 <sup>st</sup> )	Tea Ceremony in Uji History Lecture Earthquake Lecture Himeji Castle and Hiroshi (by Shinkansen "Bullet Tr Science Lectures	Trip to Osaka Temples in Nara Temples in Kyoto Kobe Museum ima Memorial Peace Park rain") Sake Brewery

We also took a field trip to Little Tokyo in Los Angeles on Saturday, February 23<sup>rd</sup>. IRA funds were used to support a walking tour (including the National Register of Historic Places area), led by a Japanese-American who had been interned during the second world war. This added another layer of depth into the class which I hope continues.

The class (UNIV 392) meets weekly (Wednesday at 7 PM). The topics studied in class have included History of Japan, Arts and Culture of Japan, Current Events (taken from a Japanese newspaper), and Environmental Issues specifically related to Japan. For each of these topics, students had to create and present a power point presentation. In Japan, there were additional lectures on the history of the city of Kyoto, Japanese Imperialism and expansion just before WWII, climate change research, and biotechnology research. The students are now working on their final projects, poster presentations that will be related to subjects studied in class.

This is the second time we have done this activity. The first was in Spring of 2006. We definitely learned how to make the field trip portion run smoother from experience. Most of were relatively minor changes such as better orientation tips for the students, which resulted in a more positive experience for all. We made the students work on homework assignments with each other in randomized teams extensively before the trip. This had an extremely positive effect on how closely the students worked together for the rest of the class and on the trip. Adding the piece on the Japanese-American experience added another layer of depth to the class. We will probably keep most of the things we added to the class this time around for the next time it is taught. We hope to elaborate on the Japanese-American piece more, using Little Tokyo and the Japanese-American National Museum as a resource.

We cannot help but take this opportunity to thank the IRA committee (especially the students) for supporting this activity. A majority of the students in this class would not have been able to participate without the funding provided. This was the first international trip for several students, and the first airplane ride for one student. I hope IRA continues to make instructional activities like this one its first and only priority in the future.

\*\*Please attach assessment forms from students, list of attendees, peoplesoft program report

E-mail to the Dean's Office 30 days after activity

#### Instructional Related Activities Report Form

Sponsor	DEPARTMENT
Simone Aloisio	Chemistry
	DATE (S) OF ACTIVITY
UNIV 392: Science and Technology in Japan	Spring 2010 3/19/2010-3/28/2010

PLEASE EXPLAIN (1) DESCRIPTION OF ACTIVITY; (2) HOW DID THE ACTIVITY RELATE TO A COURSE(S); AND (3) WHAT YOU LEARNED FROM THE PROCESS. 1) THE IRA FUNDS WERE USED TO PAY FOR A FIELD TRIP TO JAPAN DURING SPRING BREAK 2010. FUNDS WERE USED TO PAY FOR HOTEL, AIR, AND GROUND TRANSPORTATION. WE WERE BASED IN THE CITY OF KYOTO JAPAN, THE ANCIENT JAPANESE CAPITOL. WE TOOK FIELD TRIPS TO NARA, KOBE, AND HIROSHIMA. 2) THE COURSE MET WEEKLY DURING THE SEMESTER, BOTH BEFORE AND AFTER THE FIELD TRIP. THE FOCUS OF THE COURSE WAS JAPANESE SCIENCE AND TECHNOLOGY. STUDENTS CREATED POSTERS BASED ON LIBRARY RESEARCH OF TOPICS RELATED TO SCIENCE AND TECHNOLOGY IN JAPAN, AND PRESENTED THESE POSTERS TO THE CAMPUS COMMUNITY, WHICH INCLUDED STUDENTS OUTSIDE OF THE CLASS, OTHER FACULTY, STAFF, AND COMMUNITY MEMBERS. THESE POSTERS REMAINED POSTED IN THE LIBRARY FOR ABOUT THREE WEEKS AFTER THEIR PRESENTATIONS. I HAVE INCLUDED THE POSTERS AS AN ATTACHMENT TO THIS REPORT. THE FIELD TRIP WAS INTEGRAL TO THE CLASS BECAUSE, ALTHOUGH WE DID SPEND MUCH TIME DISCUSSING JAPAN AND JAPANESE CULTURE IN THE CLASS, THERE IS NO SUBSTITUTE TO VISITING THE ACTUAL COUNTRY ITSELF AND EXPERIENCING THE CULTURE. 3) THIS IS THE THIRD TIME THIS PARTICULAR CLASS HAS BEEN OFFERED AND I LEARN SOMETHING WITH EACH CLASS. EVERY CLASS IS A LITTLE DIFFERENT. THERE ARE SEVERAL THINGS I LEARNED FROM THE PROCESS EACH TIME, MOST TOO SUBTLE TO REALLY ENUMERATE. IF I DO TEACH THIS CLASS AGAIN, I THINK I WOULD TRY TO VISIT THE JAPANESE COUNTRYSIDE. I WOULD LIKE TO FIND A HOMESTAY, OR PERHAPS A TEMPLE STAY. I THINK THIS WOULD ENRICH THE EXPERIENCE.

\*\*Please attach assessment forms from students, list of attendees, peoplesoft program report

Andrew David Del MartoCCarolyn Ruth DuPMark Anthony FloresBlHok, JoanneITKristin Michelle HronekHlNeggin KeshavarzianPSRina Eleni KoenkaCHCourtney Michelle NuzumCH	IST 2011 SY 2013 HEM 2011 HEM 2011	
Adam Plair Cast	2011	
Jack Robert Seeley	2010	

E-mail to the Dean's Office 30 days after activity