

Instructionally Related Activities Funds Request Fall 2019

▼ Submitter

Submitter Name

Kara Naidoo

Submitter Email

kara.naidoo@csuci.edu

▼ 1. Basic Details

Activity Title

Future elementary school teachers contribute to scientific knowledge production through Citizen Science experiences on Santa Rosa Island

Activity/Event Date

Fall 2019

Date Funding Needed By

Fall 2019

Previously Funded?



No



Yes

Additional Proposers

Bob Bleicher

Academic Program(s)/Center Name(s)

Liberal Studies

Estimated total Course Fee revenue

0

Amount Requested from IRA

4,922.00

Estimated Number of Students Participating

20

▼ 2. Brief Activity Description

Describe the activity and its relationships to the educational objectives of the students' program or major

Brief Activity Description

The goal of the trip is to have future elementary school teachers (who are traditionally female, and have low science teaching self-efficacy) participate in Citizen Science activities on Santa Rosa Island. Citizen Science projects rely on the collection and analysis of data relating to the natural world by members of the general public, and are typically part of a collaborative project with professional scientists. Multiple Citizen Science projects exist on Santa Rosa Island. By participating in Citizen Science projects these teachers directly contribute to science knowledge production, have the opportunity to see themselves as science-able, and develop a more holistic view of science that they will be able to share with their future K-5 students. Many elementary school teachers have a narrow view of the nature of science, the process of science (that science is done in a lab, with a controlled experiment), and there is one method – “the scientific method” – of doing science.

The learning outcomes for the teacher candidates participating in Citizen Science activities on Santa Rosa Island are to (1) increase future teachers' science interest, (2) increase science teaching self-efficacy of future teachers and (3) develop future teachers' conception of what is science, who can contribute to science and what counts as science. These learning outcomes can be accomplished by having future teachers participate in Citizen Science activities on the Santa Rosa Island so they can participate in the process of science, contribute themselves to scientific knowledge production and learn how to lead future elementary students in Citizen Science activities scientific knowledge production.

▼ 3. Learning Outcomes and Relation of 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.

1. Please list all classes that directly relate to the proposed activity.
2. For each class listed, describe in detail how exactly the IRA activity will be integrated with the class's activities, how often/ on what expected date(s), and to what extent

Learning Outcomes and Relation of IRA to Course Offerings

This project will occur one weekend in October or November during the Fall 2019 semester (depends on availability of Santa Rosa Island bunkhouse). This project will support students in the Liberal Studies program, specifically students have enrolled in or will be enrolled in science content classes for elementary school teachers such as: Geo 300, Bio 170 and Physc 170.

The learning outcomes from these courses that closely align with the Santa Rosa Island Citizen Science experience for future elementary school teachers are:

1. (Geo 300) Explain basic principles in Geology including minerals, rocks, surface geological processes, and hydrology. In addition, explain the basic principles in oceanography including the physical structure and chemical composition of the oceans, tides, and ocean features.
2. (Bio 170) Demonstrate critical thinking skills and identify the crucial role of life science in planning K-6 curricula
3. (Physc 170) Use scientific vocabulary appropriately, select and use a variety of scientific tools and resources, organize and express ideas clearly and convincingly in oral and written forms, and communicate scientific concepts, experimental design, results, interpretations, and conclusions to their peers.

▼ 4. Activity Assessment

Describe the assessment process and measures that the program will use to determine if it has attained its educational goals.

Please note that a report will be due at the end of the semester.

Description of Assessment Process

To determine if this project has attained its educational goals I will use a pre-post Science Teaching Self-Efficacy Beliefs Instrument (STEBI-B) which was designed to measure elementary school teacher candidates' outcome expectancy beliefs (do teachers believe their actions influence student learning) and personal science teaching efficacy (do teachers believe they can effectively teach science to children). I will also use teacher candidates' guided written reflections about their science teaching and learning experiences through the Citizen Science projects and how these experiences can translate to their future classrooms and teaching decisions.

▼ 5. Activity Budget

Please enclose a complete detailed budget of the entire activity. Indicate specific items that you are requesting IRA to fund.

You should use either the Regular Activity budget (for events on campus) or -- if your event involves any travel-- you MUST use the IRA Travel Budget Form.

You can download both of the IRA Excel Budget sheets at <http://www.csuci.edu/ira/application.htm>.

Activity Budget

[Naidoo_ira-travel-budget-form-ay18-19.xlsx](#)

▼ 6. International Trips

If your event is an international trip submitted through the Center for International Affairs, you must include copies of:

1. Complete Center for International Affairs/ UNIV 392 proposal
2. The program budget as submitted to the Center for International Affairs (to ensure congruency between the two budgets)
3. as well as a copy of the course syllabus

Center for International Affairs Budget

Copy of Center for International Affairs Proposal

Course Syllabus

Certification

☒ I certify that students attending this trip are not previous or repeat attendees of a prior International UNIV 392 Trip

▼ 7. Sources of Activity Support

Please list the other sources of funding (including course fees), and exact expected amounts of additional support for the activity. Please indicate if there are no other sources of funding

Other Sources of Funding

Total requested IRA is \$4,922.00. This includes lodging, travel, food and Citizen Science programming for 20 students and 3 faculty members. There are no other sources of funding for this project.

▼ 8. Promoting Participation

What is your intended audience and how do you intend to market this to your students?

The intended audience for this project are undergraduate seniors who are Liberal Studies majors. Most of these students plan on entering a teacher credential program after graduation. There are about 350 Liberal Studies Teaching and Learning majors, and about 100 seniors. I will make a flyer advertising the Santa Rose Island Citizen Science project and Bob Bleicher will email out to the 100 Liberal Studies Teaching and Learning seniors.

If this is an event that is off campus, how do you plan to bring back the benefit of this event to campus?

This is an off-campus event. In addition to the deep learning and enrichment experiences these Liberal Studies students are bringing back to campus, coursework and future K-12 classrooms, I plan to share the students' experiences and development on the School of Education website.

▼ 9. Approval and Acknowledgement

Program Chair/Director

Correia, Manuel G

Dean

Sevier, Brian

Conditions and Considerations

- ☐ **Artist/Performer/Speaker Fees & Honoraria:** On the Activity Budget, please indicate whether the vendor's price was set by you/CI Representative, or is a fee that was set by the vendor.
- ☐ **Large Event:** For a large event, consultation with the campus Event Coordinator's office at (805)437-8548 is required.
- ☒ **Field Trip:** Sponsor must comply with all policies found at:
<http://www.csuci.edu/rm/programs/academic-field-trip-guidelines-and-forms.htm>. If approved, Identified Risks of Participation and Release Agreement must be submitted for each student to the Program Office (Public Folders-HR Forms).
- ☒ **Involves Human Subject Data Collection for Public Dissemination -Requires IRB Approval :** If Project Sponsor proposes to conduct research with human participants, the proposal may be subject to Institutional Review Board for the Protection of Human Subjects (IRB) review. All research that involves any type of interaction with human subjects - from simple surveys to complex biomedical procedures - must be reviewed and approved by the IRB prior to starting the research. Data for "Public Dissemination" indicates interviews/surveys that result in a journal/poster session/newsletter, etc.
- ☐ **IT Requirements:** If your activity has IT requirements, coordination with and approval from IT Administration is required.
- ☐ **International Travel:** Requires International Travel application be submitted to Center for International Affairs. Include copy of CIA budget and course syllabus in your IRA application. Must utilize the University's Foreign Travel Insurance Program (FTIP) and follow all International Travel Guidelines listed at: <http://www.csuci.edu/rm/insurance/foreign-travel.htm>
- ☐ **Risk Management Consultation:** Events that involve or engage students directly with a performer or artist (i.e. in a workshop or other than as a passive audience member) will require consultation with Risk Management. Requires proof of correspondence with Risk Management.
- ☐ **Space/Facilities Services Requirements:** Consultation and coordination with Facilities Services is required.

Acknowledgement

- ☒ I acknowledge that I have reviewed and accepted the Conditions and Considerations herein. I acknowledge that the activity sponsor will be responsible for managing purchases, travel arrangements, and all transactions related to approved activities. Please check off boxes as appropriate.


▼ Chair Review

Recommendation

- ☒ I recommend approval of the IRA Funds Request described on this page
- ☐ I DO NOT recommend approval of the IRA Funds Request described on this page

Comments

Happy St. Patrick's Day.

 Manuel Correia Mar 17 2019

▼ Dean Review

Recommendation

- ☒ I recommend approval of the IRA Funds Request described on this page
- ☐ I DO NOT recommend approval of the IRA Funds Request described on this page

Comments

 Brian Sevier Mar 25 2019