

Instructionally Related Activities Funds Request Spring 2019

▼ Submitter

Submitter Name

Gregory Wood

Submitter Email

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▼ 1. Basic Details

Activity Title

Air and Water Quality Monitoring On Campus and Santa Rosa Island

Activity/Event Date

Spring Semester 2019

Date Funding Needed By

mid-february 2019

Previously Funded?

- No
 Yes

▼ Previously Funded Proposal

Semester/Year

Spring 2018

Proposal # (if known)

934

Report submitted for previously Funded Activity?

- No
 Yes

Please upload a copy of the report

[ira-report-Wood_SPR2018.pdf](#)

Additional Report #1

Additional Report #2

Additional Report #3

Additional Proposers

Academic Program(s)/Center Name(s)

UNIV Program

Estimated total Course Fee revenue

n/a

Amount Requested from IRA

1950

Estimated Number of Students Participating

10

▼ 2. Brief Activity Description

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

Brief Activity Description

A simple water quality monitor, measuring temperature, pH and turbidity will be built, by hand, with very simple components. The existing portable air quality sensor array will be expanded. Students will take readings around campus and on Santa Rosa Island, funding permitting, while at the Research Station, the existing Sustainability Monitoring equipment will be upgraded and maintained. The sensor reading the water use of the station needs to be replaced, and the website interface to display water and power use at the station can be improved to improve readability.

▼ 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

1. UNIV 492
2. Students design circuits around the sensors purchased through this IRA. Students write (or modify) software to get readings from sensors and store data for later analysis. Air quality results are compared with prior years. Water quality results will be the original data used as a baseline for future studies. We want to identify a location on campus to install a long-term air quality study.
Students present findings at the Sage Student Faculty Research Conference at the end of the Spring semester.

▼ 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

1. The sensor arrays must function properly. 2. A sufficient number, and variety of campus and island locations are monitored. Last year, we did just over 100, this year I am asking for a larger team of students envisioning that more data can be collected. 3. The quality of the SAGE presentation is indicative of the abilities of the students to synthesize the data collected.

▼ 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

[ira-travel-budget18-19_WOOD_UNIV492.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

Physics provides the use of electronic components (low cost, and generally we don't need many) and various tools such as meters, power supplies, displays and oscilloscopes.

The PI provides hundreds of dollars of extra equipment each year this course runs. The PI is requesting more funds for supplies to replace malfunctioning sensors or to try alternative sensors.

▼ 8. Promoting Participation

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

Students are recruited to enroll in UNIV 492 via word of mouth. The PI will ensure the balance needed in the class: generally we need at least one student with extensive background in one of the following areas: computer programming, electronics, and sustainability. Any additional students required are sought through the PI contacting various program faculty in allied fields who might know of students who could benefit from this experience.

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

Part of this course involves a trip to the Research station on Santa Rosa Island. The data are brought back and compared to prior years and presented at SAGE.

▼ 9. Sustainability

If appropriate, indicate how the content or delivery of the project promotes sustainability at CI.

Sustainability

UNIV 492 is directly about sustainability. 1. Students are educated about sustainability. 2. Air quality readings can be used to improve efficiency of buildings. 3. Knowledge of air quality where faculty and staff work encourages people to close (mostly) or open (rarely) their windows to conserve energy or (rarely) to freshen the air in their work area (usually due to excess build up of CO2). 4. The data on air and water quality will be presented at SAGE to a broad campus audience.

▼ 10. Approval and Acknowledgement

Program Chair/Director

Francois, Marie E

Dean

Adler, Mary

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. 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



▼ **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

