

Instructionally Related Activities Funds Request Spring 2020

▼ Submitter

Submitter Name

Geoffrey Dilly

Submitter Email

geoffrey.dilly@csuci.edu

▼ 1. Basic Details

Activity Title

Whale Watching Excursion for Biol 304 and 320

Activity/Event Date

03/07/2020

Date Funding Needed By

02/07/2020

Previously Funded?

- ☒ No
☐ Yes

Additional Proposers

Academic Program/Center/Organization Name

Biology

Estimated total Course Fee revenue

N/A

Amount Requested from IRA

\$2293

Estimated Number of Students Participating

64

▼ 2. Brief Activity Description

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

Brief Activity Description

This IRA proposal is for a whale watching charter (at the school rate) to occur during the Grey Whale migratory season of March 2020 – likely on a Saturday or Sunday which works for the schedule of the classes and the charter schedule. I aim to bring two classes along on this trip: Deep Sea Biology and Ecology (Biol 320) and the Animal Physiology (Biol 304) which I will teach for the first time in Spring 2020. Observing marine mammal physiology and behavior has direct applications to both courses – including diving behavior, migration, echolocation, feeding and trophic interactions. I will also invite other interested faculty from Biology and ESRM to join us (space permitting) for no additional cost. The tour would take approximately 3-3.5 hours and would include breakfast/lunch. Students from each course will have a written assignment following this experience appropriate to their learning outcomes described below.

The vessel available to charter is the Ranger 85 – an 85' fishing and whale watching vessel operated out of the Channel Islands Harbor. I have reached out to Channel Islands Whale Watching operated by Channel Islands Sportfishing (Oxnard, CA) and received a quote of \$1900 plus tax for a full boat rental at the educational rate which I calculated to be \$2043. This price is firm regardless of the number of passengers; the vessel can hold 70 passengers max and a private charter would ensure the students receive a focused, private tour. In addition to my attendance, there will be volunteer naturalists accompanying us on the charter. They whale watch with the Ranger 85 daily from December to April and have stellar reviews and success in locating dolphins and whales.

To keep costs low, students will be required to find transportation to and from the Channel Islands Harbor - I will work with both classes to establish carpools so that all students can attend. I will purchase bulk food from Costco and bring it with me to the boat so that students will be able to eat breakfast/lunch on board. I estimate a cost of \$260 for ~65 people (\$4/person).

Both Biol 320 and 304 are currently entirely classroom lectures. While future iterations of the classes will involve a lab component of Animal Physiology as potential class trips on the CI research vessel being built – there are no field/lab components available to students in this class currently. Biology is best learned through observation, field experiences, and interaction – and this IRA will allow these students to better understand their classroom instruction. Informally, I polled my deep-sea biology students last year to see how many had ever been out to sea; almost all had been to the beach, but only 50% had ever been on a boat. This may be a transformative experience for those who have never been on the water before, as well as for the majority that have never encountered marine mammals up close.

Please provide a list of administrative support work needed to fulfill the goals of the proposal. Indicate the estimated time of year and amount of time needed for each work item to the best of your ability:

Administrative Time

Winter 2020 - (Less than 1 hour) to reserve the booking with Channel Island Sportfishing. No other Administrative assistance required.

▼ 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

Biol 320 – Deep Sea Biology and Ecology (~24 students)
Biol 304 – Animal Physiology (~40 students)

Students in both Biol 320 and 304 have course objectives that relate directly to marine mammals; I have designed the syllabi to address these topics in the classroom shortly before our excursion so that they will be informed observers. Further, I plan to lecture onboard as we transit out about whale physiology, ecology, echolocation and diving behaviors to enhance the experience. I will encourage mixed class discussion groups on board to review these topics as they observe and record behaviors on the excursion. While I am making this a mandatory trip, I will make alternative arrangements for students who cannot attend due to extenuating circumstances.

The event will take place in early March – tentatively Saturday, March 7th, 9am if the schedules fit for both courses and the Ranger 85 is available, flexible by 1 week. By this point in the semester, Biol 320 will have had a unit on echolocation, reading and discussed primary literature on how whales navigate and feed using sound. In Biol 304, students will have studied the mammalian dive response shortly before the trip, as well as migratory and feeding behaviors of grey whales. As stated before, first-hand encounters with physiological and ecological concepts will further cement the concepts presented in both lecture classes. Follow-up lecture discussions of the experience will occur in both courses, and a written assignment of the experience will be due in the following weeks in both Biol 320 and 304

▼ 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

I will send out a survey ahead of time to both courses with the following questions:

- 1) Have you been to the ocean before?
- 2) Have you been on a boat?
- 3) Have you ever observed whales (from shore or on a boat)?
- 4) Please describe the mammalian dive response
- 5) Please describe the process and usages of echolocation
- 6) Please describe the grey whale migratory cycle
- 7) Explain three evolutionary adaptations whales and dolphins have to surviving in a marine environment as compared to humans and other terrestrial animals.

The final four questions will also be on an exam after the field experience to judge the progress on these important physiology and ecology questions. Additionally, students from both Biol 304 and 320 will need to write a 1-2-page reflection piece on how this excursion improved their understanding of our nearby marine environment and the mammals that reside within. I will encourage (but not require) students to regard this assignment creatively (allowing for submission of poems, songs, etc) as a way for students to emotionally connect with the concepts – a rare outlet for those studying STEM track disciplines. I will assess both their transformative experience and their scientific growth in my end-of-semester report.

▼ 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

DILLY IRA 2019 WhaleWatching Budget.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

No other sources of funding available for this IRA proposal.

▼ 8. Promoting Participation

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

This will be a required component of Biol 304 and 320 and will offer students a field component to an otherwise lecture based course. It will be announced on the first day of class in both courses to ensure students have enough time to prepare and schedule. My intended audience are students interested in understanding marine physiology, ecology, and behavior - which align closely and enhance the course offerings.

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

Students who participate in this will have an opportunity to learn about their natural backyard - and that experience will return with them. They will gain both scientific experience as well as likely an emotional experience of encountering and observing whales. Many of our students on campus have never been on a boat or out to sea for any period of time. Considering our campus name evokes the marine environment, this is a deficit. I will encourage returning students to discuss their experiences with peers and reflect on the excursion in a creative writing follow-up assessment as well as testing their growth as biologists. My goal is to inspire innate conservation and appreciation of the largest animals on earth, a stewardship that will last beyond the classroom.

▼ 9. Approval and Acknowledgement

Program Chair/Director

Mozingo, Nancy

Dean

Wyels, Cynthia (Arts & Sciences)

Program Chairs and Deans may inform proposer of any staffing capacity needs or limitations (optional comments below):

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. Please note that late applications will not be reviewed by the committee.

▼ 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

 Nancy Mozingo Nov 3 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

 Cynthia Wyels Nov 22 2019