

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

Application
Instructionally Related Activities Funds Request
2013-2014 Academic Year

DEADLINES: Application Submitted to AVP:
Fall and Academic Year 2013-14: 03/01/13
Spring 2014 deadline: 10/01/13

Submittal Process: Applications must be first be signed by your program chair and then submitted to the appropriate AVP for approval. AVP's will next forward application to the IRA Coordinator for review. If there are questions or concerns, you may be asked for revisions or additional information. The IRA Coordinator will then forward applications to the IRA Committee for consideration.

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.

Duplicate requests- if Sponsor is submitting multiple proposals for recurring events involving speakers, musicians, etc., please combine your requests into one proposal.

Activity Title: Habitat Choice in Hawaii's Humpback whales
An interdisciplinary field based research and service learning opportunity.

Project Sponsor/Staff (Name/Phone): Rachel Cartwright 805 437 2635
Cindy Wyels 805 437 3260

Activity/Event Date(s): March 22nd – 29th 2014

Date Funding Needed By: Jan 2014

***Please Note that for Fall Requests the earliest that you will be notified of funding availability will be early June 2013 and for Spring Requests early January 2014.*

Previously Funded by IRA? X YES NO If Yes, what Semester/Year? Spring 2013
Proposal(s) # 475 (if known)

Report submitted for previously Funded Activity?: X YES NO

***Please attach copy of previous IRA Report**

Academic Program or Center Name: Biology / Mathematics

Estimated total Course Fee revenue: 4500 (10 students @\$450)

Amount Requested from IRA: \$23,458 (Should match "Total Requested from IRA" on Page 5)

Estimated Number of Students Participating: 10

Conditions and Considerations Checklist

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

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 themselves.

Large Event- For a large event, consultation with the campus Event Coordinator's office at (805)437-8548 is required.

Equipment Purchase- If requesting large equipment purchase -over \$200, or will be a fixture installed on campus- Project Sponsor must show proof of correspondence with OPC Administration. In addition, all other purchases must follow Procurement Guidelines.

X **Field Trip**- Sponsor must comply with all policies found at <http://www.csuci.edu/hr/AcademicFieldTripGuidelinesandForms.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.

Exempt from IRB Approval –If your project is exempt from IRB review, include copies of correspondence with IRB Board. It is the Project Sponsor's responsibility to inquire with the IRB **prior** to IRA application submission to determine if the project is exempt from IRB review so that funding is not delayed.

IT Requirements- If your activity has IT requirements, your application requires proof of correspondence and approval from IT Administration.

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.

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/OPC Requirements, Infrastructure/Remodel-Requires proof of correspondence with OPC Administration.

Late Submission - Requires explanation for emergency funding.

Other -

Application
Instructionally Related Activities Funds Request
2013-2014 Academic Year

Instructions and Requirements – Written Portion

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.
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.
 - a. Please list all classes that directly relate to the proposed activity.
 - b. For each class listed in #2a, 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.
3. **Learning Outcomes.** List all expected learning outcomes, as connected specifically with each course listed in #2.
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 30 days after your activity.**
5. **Activity Budget.** Please enclose a complete detailed budget of the entire activity. **Bold** specific items that you are requesting IRA to fund (Page 6).
6. **International Trips.** If your event is an international trip submitted through the Center for International Affairs, you must include a copy of the program budget as submitted to CIA (to ensure congruency between the two budgets), as well as a copy of the course syllabus.
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.
8. **Audience/ Marketing/Promotions.** Who is your intended target audience? How will your event be advertised to students?
9. **Sustainability.** If appropriate, indicate how the content or delivery of the project promotes sustainability at CI.
10. **Images.** For previously funded IRA activities, include copies of images from past IRA activity or activities, demonstrating student participation and levels of students served.
11. **Acknowledgment.** Project Sponsor and Program Chair acknowledge that they have reviewed and accepted the Conditions and Considerations herein.

1. Brief Activity Description: Describe the activity and its relationship to the educational objectives of the students' program or major.

This research experience and service learning project has been ongoing since Spring '09 and operates annually, providing students the opportunity to participate in ongoing conservation-based research into habitat preference in Hawaii's humpback whales. Students participate in all aspects of the research, from experimental design to post-trip data analysis. Findings from the first three years of the research study were recently published in the Journal PLOS ONE (Impact factor 4.3) and as the study continues, the data gathered and analyzed by our students is being applied to directly address key management issues in the region.

In addition to participating in the research study, the trip provides students with the opportunity to immerse themselves in the unique natural environment and the culture of the Hawaiian Islands. They see first-hand the conflicts that develop in the management of fragile marine environments, while associated outreach activities round out the trip to allow students to fully consider and appreciate the human footprint in regions such as this.

As a precursor to the course, many students who apply have previously taken a new, interdisciplinary course, Interfaces, that was offered for the first time on the CI campus during the Spring 2012 semester. This University 298 course was part of the Keck Foundation-funded Spiral Initiative and introduced students to the wider issues of how – at the societal level – we relate to and connect with our environment. The study of patterns of inshore habitat use in our local marine mammal population was presented as a case study, around which students reviewed associated literature, engaged in field excursions and worked on issues such as project design and interpretation of data. The proposed trip to Hawaii builds on this unique foundation of student engagement and interdisciplinary study and while the trip will certainly not be limited to students who completed the 298 class, still, this class does provide the opportunity for students who took part in the Spiral class to continue to engage in the research process.

For the University 394 course proposed here, the trip to Maui will form the cornerstone activity of a semester-length course focusing on the behavioral ecology of marine mammals. The content of this course will address the educational objectives of biology, ESRM, chemistry and mathematics majors. Essentially, the course provides students with the opportunity to participate in faculty- mentored research, an activity that has now been established as a best practice within undergraduate STEM education. From a content perspective, students will study the ecology of tropical marine ecosystems, the principles of behavioral ecology and the inherent challenges of management of human activity within this tropical setting. Additionally, as Dr. Cindy Wyels (Mathematics) joins the project this year, additional perspectives will be incorporated in the detailed analysis of the data, and students will be introduced to the principles of statistical modeling, along with more traditional techniques of statistical data analysis.

To date, our results from the study present a compelling picture of how human activity may impact marine mammal use of critical habitat. In previous years, students have researched and produced synopses on a wide variety of management issues impacting this region, from eco-tourism to underwater noise. Many of the participating students have subsequently chosen to continue these studies, incorporating their work into capstone and other independent research projects. We

see this as one of the most valuable outcomes of the course, as students voluntarily pursue their own original interests, alongside the contribution that they make to the larger research effort. This year, we will again encourage students to develop their own areas of interest, and to actively research these areas during their studies, both here on campus and during our time in the Hawaiian islands. On completion of the trip, students will be invited to present these studies on the Keiki Kohola Project website (www.caringforcalves.org) and to include these studies in their end-of-year research presentations at the Sage Research Forum.

In response to student feedback from previous years, we plan to continue to include several cultural experiences as part of the trip: Students will take a hike through the rainforest to a waterfall, they will visit cultural sites around the island, and they will attend a traditional Hawaiian Luau. These activities will ensure that their experience is well-rounded and reaches beyond their own immediate disciplines and interests. Additionally, as part of our research program in Hawaii, students will travel to an adjacent island, Lanai. Lying directly across the Au'au Channel, Lanai provides a perfect comparison site for our work to date along the shoreline of Maui. Lanai sees very low levels of vessel traffic and is free of agricultural activity. Our aim will be to conduct simultaneous surveys of the use of the Maui and the Lanai shorelines. Small cetaceans, such as spinner dolphin, are especially plentiful in this more remote location and pristine reefs line the shoreline too. Working for a short time in this area will allow students to experience the notable differences between these two sites. From a research perspective, the monitoring of these areas will provide new and very valuable information and comprise a substantial contribution to the work that this team has completed to date.

As in previous years, we are keen to encourage students from all programs to participate in the course. Previously, students from the Communication and Business programs have participated in the course. Students from a range of programs were enrolled in the Interfaces course and we plan to maintain this interdisciplinary approach to our work, promoting the course across campus and actively encouraging applications from students outside the traditional sciences.

2. Relation to IRA to Course Offerings.

The work covered in the course complements a range of other biology, chemistry, and mathematics courses, including Behavioral Ecology (Biol 407), Marine Biology (312), Science and Public Policy (Biol 345) Quantitative Methods in Biology (Biol 203), Environmental Chemistry (Chem 301), Quantitative Analysis (Chem 250/ 251), and Research Design and Data Analysis (Math 430). The data analysis and statistical modeling aspects also provide a basis for growth for the minor in Statistics that is currently in development within the Mathematics program.

Additionally, many biology students are already actively involved in related laboratory based research projects, under the supervision of several biology faculty (Biol 494). Associated research studies cover the ontogeny of muscle tissue (Dr. Cori Newton), the development of diving capacity (Dr. R. Cartwright) and the role of up-regulators in the production of myoglobin (Dr. C. Sackerson). The first manuscript for these lab-based investigations is currently in review at the Journal of Experimental Biology. The field course proposed here provides a practical, field based extension of this work and as we develop a core of students who are experienced in

marine mammal studies such as this, we will be well-placed for extending this work to include more local settings, with a regional focus on the marine mammal populations of the Santa Barbara Channel.

3. Learning Outcomes.

Students who participate in the course will:

- Design experiments to test scientific hypotheses, collate data, conduct statistical analyses and evaluate research outcomes.
- Gain first-hand experience in problem solving – always a component of field research that involves animals in their natural setting.
- Identify topic appropriate research materials, synthesize information from a variety of sources and gain experience in effective communication of results in a variety of media.
- Develop communication skills and the ability to work as an effective team member in a diverse cultural setting
- Use analytic and data collection equipment in situ.
- Work as part of federally permitted research team, and contribute to ongoing efforts for the conservation of a federally listed, endangered species.

4. Activity Assessment.

The course assessment will comprise two components, related to its two key deliverables:

1. Student research projects will be assessed according to a rubric that measures their engagement with research planning and preparation, design and subsequent data analysis; grades will be assigned based on this rubric.
2. A topics-based component of the course will be assessed not only by the instructors, but by members of the target audience for the different media as well, using a voluntary survey form.

The students will also complete a self evaluation of both their research and their outreach activities using a rubric that they develop at the beginning of the term.

5. Activity Budget.

See attached.

6. International Trips.

N/A

7. Sources of Activity Support.

The Keiki Kohola project will provide access to its research vessel, logistic support and most of the field equipment required by the students.

This represents an in-kind donation of around \$2000 per student, based on current equivalent Earthwatch-type programs, which charge for participation in this type of project. Monitoring equipment will be provided by Keiki Kohola Project, including cameras, computer equipment, field equipment such as GPS units, and water quality monitoring equipment.

Additionally, each year a small local whale-watching company, Ultimate Whalewatch Maui, has made available to us the use of small research vessel, free of charge. This represents an in-kind donation of \$6,000. While this donation is contingent on vessel availability, the boat has been provided in three out of the last four trips. As a result, our trip has come in consistently below the requested budget.

Students will also be involved in fund raising activities after the trip. Planned activities include the sale of photography and t. shirts. Production costs of these items will be covered by the Keiki Kohola Project. Profits generated will primarily be donated to offset the carbon footprint of the trip.

8. Audience/ Marketing/Promotions.

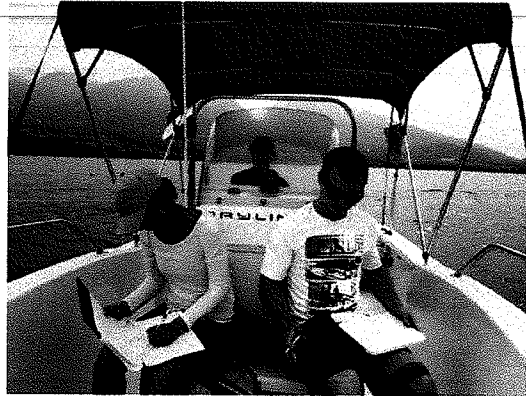
N/A

9. Sustainability.

The contribution this activity makes to sustainability on campus may be indirect, however, participation in this activity impacts student attitudes towards sustainability. Their time in Hawaii gives them a chance to see and reflect on the impact that anthropogenic activities can have, both on the larger marine environment and on marine megafauna. Students who have completed the course will be more informed on these issues and hopefully persuaded by their own experiences to better embrace the ideologies and principles of sustainability.

10. Images.





IRA Travel Activity Budget



California State
University
ISLANDS

INSTRUCTIONALLY
RELATED
ACTIVITIES
CHANNEL

Activity Title:

2013-2014

Sponsor Name: R. Cartwright, C Wyels

Number of Students Participating: 10

Number of Faculty: 2

I.	Student traveling expenses:	Cost/ea	# Requested	Total	Comments/Additional Notes
	Airfare	\$1,050.00	10	\$10,500.00	
	Ground Transportation	\$150.00	1	\$150.00	2 students plus luggage to ands from mauai airport
	Lodging	\$550.00	10	\$5,500.00	
	Registration Fees			\$0.00	
	Entrance Fees			\$0.00	
	Meals (included)	\$110.00	10	\$1,100.00	
	Cultural Activities	\$160.00	10	\$1,600.00	ferry trip + cultural show (ulalena)
	Vehicle/Van Rental	\$880.00		\$880.00	
	STUDENT TRAVEL TOTALS	\$12,600.00		\$29,430.00	
II.	Faculty Traveling Expenses:	Cost/ea	# Requested	Total	Comments/Additional Notes
	Airfare	\$1,050.00	2	\$2,100.00	
	Ground Transportation			\$0.00	
	Lodging	\$550.00	2	\$1,100.00	
	Registration Fees			\$0.00	
	Entrance Fees			\$0.00	
	Meals (included)	\$110.00	2	\$220.00	
	Cultural Activities	\$160.00	2	\$320.00	
	Other:			\$0.00	**
	FACULTY TRAVEL TOTALS	\$1,870.00		\$3,740.00	
III.	Operating Expense Budget	Cost/ea	# Requested	Total	Comments/Additional Notes
	Supplies			\$0.00	
	Other: vessel running costs	\$3,500.00		\$3,500.00	captains, fuel, harbor fees
	additional vessel hire	\$4,000.00	1	\$4,000.00	
	vessel insurance + survey	\$2,300.00	1	\$2,300.00	Annual survey of the vessel is required for insurance
	OPERATING EXP. TOTALS	\$9,800.00		\$9,800.00	
IV.	Out of Pocket Student Expenses	Cost/ea	# Requested	Total	Comments/Additional Notes
	Health Insurance			\$0.00	
	Tuition/Registration			\$0.00	
	Travel Insurance			\$0.00	
	Out of Pocket Meals			\$0.00	
	Other:			\$0.00	
	STUDENT EXP. TOTALS	\$0.00		\$0.00	
V. UNIV 392 INTERNATIONAL TRIPS ONLY. Total costs of the trip. Please Note that Formulas Calculate Automatically					
	Total Student Traveling Expenses			\$29,430.00	
	Faculty Travel Expenses, if funded at 100%			\$3,740.00	
	Operating Expenses, if funded at 100%			\$9,800.00	
	TOTAL IRA FUNDING REQUESTED			\$33,170.00	
	Out of Pocket Student Expenses			\$0.00	Not funded by the University
UNIV 391/392 & International Trips only					
	Maximum IRA student funding @ 2/3rd of student total cost			\$19,718.10	
	1/3 of total cost payable by students through course fee			\$9,711.90	
	TOTAL IRA FUNDING REQUESTED FOR INT'L TRIPS			\$23,458.10	
	Out of Pocket Student Expenses			\$0.00	Not funded by the University

Instructionally Related Activities:

HABITAT CHOICE IN HAWAII'S HUMPBACK WHALES ; MARCH 16TH – 23RD 2013

SUPPORTING DOCUMENTATION

1) Student evaluations or assessments

These have been provided via survey monkey.

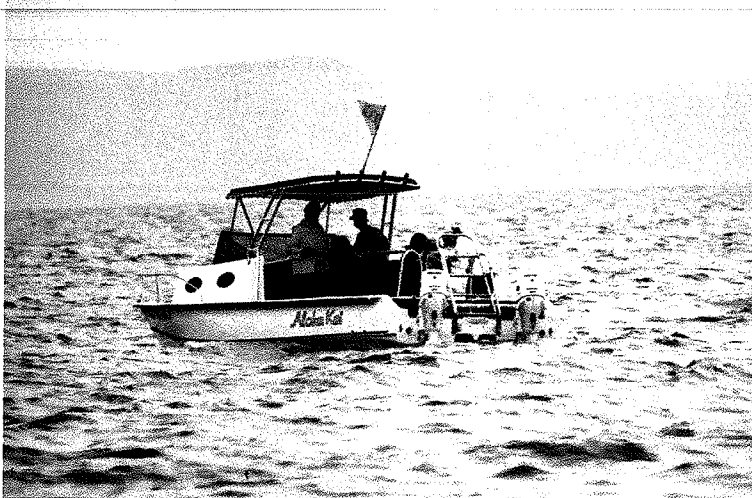
2) A list of attendees complete with each student major and expected graduation date

Student	Major	Grad date
[REDACTED]	Biology	May-14
[REDACTED]	Biology	May-14
[REDACTED]	ESRM	May-13
[REDACTED]	Biology	May-13
[REDACTED]	Biology	May-13
[REDACTED]	ESRM	May-14
[REDACTED]	Biology	May-14
[REDACTED]	Biology	May-13
[REDACTED]	Chemistry	May-14
[REDACTED]	Biology	May-13
[REDACTED]	Biology	May-13

3) Images demonstrating student participation (up to 6 images)



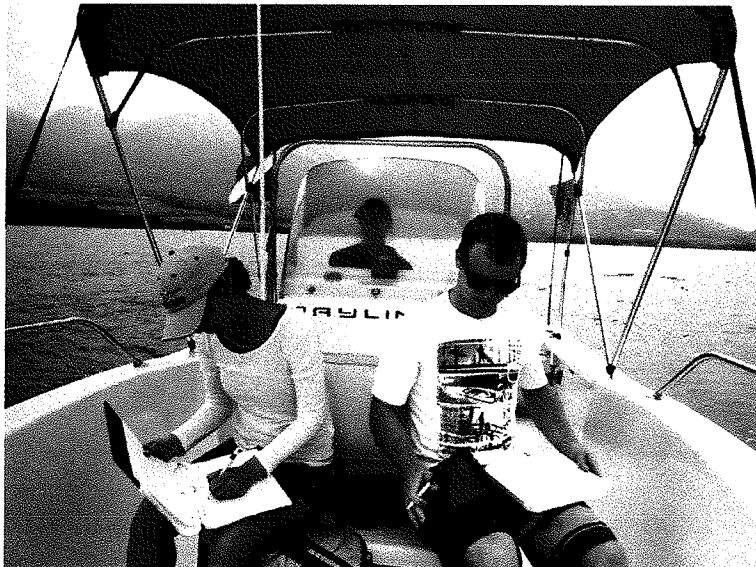
IRA participants, Maui 2013



A blustery day on the water



Students onboard the Aloha Kai



_____ and _____ recording data on the
Miss Emily

4) Summary of expenses

Expenses	
Field trips in California	1,020.00
Flights	8,696.00
Accommodation	4,973.75
Car hire	866.48
Food	1,314.78
Boat Insurance	2,050.00
Hull Survey - required for boat insurance	247.00
Vessel running costs	3,404.91
Cultural activities	1,051.74
Ferry trip	\$780.00
airport shuttles on Maui	150.00
tax on procard	13.76
Total	24,568.42

Notes:

The trip came in slightly lower than budgeted, primarily as a local business, Ultimate Whale Watch Maui, donated a second boat, the Aloha Kai for use on the project. Also, the Keiki Kohola Project, the research organization that we partner with on Maui, covered one instructor flight (RC) allowing us to increase the number of student participants to a total of 11 – 10 new students and one student returning as a student mentor.

Instructionally Related Activities:

HABITAT CHOICE IN HAWAII'S HUMPBACK WHALES; MARCH 16TH – 23RD 2013

Supplemental material – Answers to questions

(1) PROVIDE A DESCRIPTION OF THE ACTIVITY;

This activity comprises a seven day trip to the island of Maui, Hawaii, where students join an established non-profit research organization, The Keiki Kohola Project, to assist in an on-going research study looking at habitat use by female-calf humpback whale pairs in Hawaiian waters. Students stay in Lahaina, a small town on the west coast of Maui, they are out on the water each day and actively engaged in gathering data while working alongside experienced members of the research team.

Prior to leaving for Maui, all student participants take a three unit course that covers scientific methods, the behavioral ecology of marine mammals and relevant aspects of marine conservation biology. Students work in groups to prepare possible projects to address specific questions during their time in Hawaii. While in the field, the research is conducted under a federally issued research permit held by R. Cartwright (trip leader, CI lecturer) and following the trip, students are engaged in all aspects of data analysis. While on the island students have time allowed for snorkeling, hiking and exploring the local area to some extent, however the emphasis is very much on time spent on the water engaged in the research project.

(2) HOW DID THE ACTIVITY RELATE TO A COURSE(S) AND/OR LEARNING OBJECTIVES?

The course that students complete prior to leaving for Maui is designed, along with the on-island activities, to directly address the course learning objectives for University 394.

Time spent reviewing relevant literature introduces students to the principles of behavioral ecology, the natural history of marine mammals and the underlying challenges of associated resource management. Students design their own experiments for possible implementation during their time on Maui, providing experience in developing feasible research questions, formulating original hypotheses, designing appropriate methods of data collection and planning subsequent methods of statistical analysis. Peer review of the research proposals in the classroom setting prior to heading to Maui leads to discussion of experimental techniques and study design, and provides the opportunity for critical thinking and problem-solving. Once the students arrive on Maui, they gain first-hand experience of the many inherent challenges involved in the translation of a proposed experimental design into a practical field setting. Each year, the students chose one or two specific studies designed by the group to incorporate into the field work on Maui. When they return to college, some students work with their own datasets, while others

utilize the long term field data gathered over the course of the study and all students are actively involved in the presentation of their findings at the annual Sage Conference. Overall, the students are provided with a unique hands-on experience that takes them through the process of scientific research and investigation from the development of a research question, to the presentation of their findings.

Over the course of these activities, the course addresses many of the key objectives of UNIV 394. Additionally, the course also addresses learning objectives from a range of other classes, including the Biosphere (Biol 335), Behavioral Ecology (Biol 407) Marine Biology (Biol 312), Science and Public Policy (Biol 345) Quantitative Methods in Biology (Biol 203), Environmental Chemistry (Chem 301) and Quantitative Analysis (Chem 250/ 251).

(3) WHAT DO YOU SEE AS THE STRENGTHS OF THE ACTIVITY?

As part of this activity, students are provided with the opportunity to work as part of a federally permitted research team, and contribute to ongoing efforts for the conservation of a federally listed, endangered species. This is a truly unique opportunity, and is especially useful for those students planning a career in this field. Additionally, students benefit greatly from the experience of working out problems in a real world setting. Leaving the students to decide on issues such as methods of recording data, handling field notes, interpreting data recorded by other students, liaising with other group members and generally meeting the challenges of undertaking field work in an often inclement and challenging environment provides students with the opportunity to build life skills that translate across their subsequent studies. Students develop their abilities to communicate, mediate amongst their peer group and function as a team member. Additionally, over the several years that this course has now been running, students who may not excel in the more traditional educational environment have emerged as group leaders within this unique setting. Particularly for these students, the experience seems especially impactful and formative, and certainly a key component of their university education.

(4) WHAT WOULD YOU SAY ARE/WERE THE ACTIVITY'S WEAKNESSES?

One challenge that we face each year is the limited group size. In 2013, 10 students participated, with an 11th student returning as a student mentor. With only a five day period to submit applications, we received over 80 applications for the class, which means a lot of very keen students did not get to participate. However, moving forward, we hope to implement related studies of local cetacean populations here in Californian waters, working with the Channel Islands Boating Center and also making use of some of the potential opportunities offered through the Santa Rosa Island Field station. These activities will be designed to build on the enthusiasm and expertise developed on our Maui program, and will allow for greater participation in terms of overall numbers of student participants.

A second challenge is maintaining a balance between the many island activities, and the research work that the students are involved in. Early morning starts and long days on the boats mean that evening lectures are not necessarily possible; however, this year we did set aside one day for alternate cultural activities and this proved very popular with the students.

(5) HOW WOULD YOU IMPROVE THIS ACTIVITY FOR NEXT TIME?

As mentioned above, in future we would plan to set aside a day for alternate, culturally-based activities on the island. This seems to develop a better sense of place in the students and also gives them a moment in the trip when they can pause and reflect on their experiences. Additionally, in planning ahead, setting aside a set time for the class to meet, both before and after the trip, is essential and needs to be organized carefully, to better ensure that all the students on the course stay fully informed and engaged in all aspects of post trip data analysis. Logistically, this was a challenge last year as I was on sabbatical however it is definitely a key, essential component of the course. The course meeting needs to be built into the schedule at the outset and going forward, the ability to attend all the class sessions will be a requirement for all enrolled students.

(6) WHAT DID YOU LEARN FROM THE PROCESS?

1. Students enrolled in the class need to be available to attend all class meetings, both before and after the trip. Class times need to be set up prior to enrollment in the course so that students can reliably assess their ability to attend class meetings.
2. Once students are exposed to the process of research, they make rapid progress, developing skills in areas such as experimental design, problem solving and independent organization, however students need to be given sufficient autonomy to identify problems and then self-correct.
3. Given the opportunity, students from our classes still surprise me with their dedication and commitment to their roles and responsibilities as future stewards of our natural resources.

Hawaii

Last Modified: 09/26/2013

Filter By: Report Subgroup

1. Event Name

Text Response

Maui Trip 2013
Maui Research Trip
Special Topics: Maui Research on Humpback Whales
2128 SPECIAL TOPICS-02:
Univ 391 Special Topics - Hawaii

Statistic	Value
Total Responses	5

2. Event Date

Text Response

March 18th
3/17-3/24/2013
3/17/13-3/24/13
Fall 2012
Spring 2013

Statistic	Value
Total Responses	5

3. How did your hear about this activity?

#	Answer	Response	%
1	Instructor	4	80%
2	Word of mouth	0	0%
3	Facebook announcement or posting	0	0%
4	csuci.edu website	0	0%
5	Flyer/ Poster	1	20%
6	CI newsletter or publication- if so, which one?	0	0%
	Total	5	100%

CI newsletter or publication- if so, which one?

Statistic	Value
Min Value	1
Max Value	5
Mean	1.80
Variance	3.20
Standard Deviation	1.79
Total Responses	5

4. Describe your experience of this activity.

Text Response

This academic trip was truly inspiring and life changing. I know personally I loved every minute of what we were doing whether we were discussing concepts, collecting data on a boat, or back at home looking at data. This trip really inspired me to do what I love, and that its okay to make your own path in life based on what you really enjoy.

This was absolutely the best thing I did while in school. I still tell everybody about the research we did. Going out and boats and being that close to the animals was a once in a lifetime opportunity. I learned so much about humpback whales and the research process as well. I would have stayed longer if I could.

It was definitely a once in a lifetime experience. Not only did we get to get witness amazing animals in their habitat but we got to experience them in a way that most people don't get to. The research skills that I was able to learn from the experience are invaluable. I learned how to photograph correct angles of whales for photo-cataloguing. I learned how to collect data while out in the field, on a boat.

This was an excellent learning experience. The hands-on learning aspect of this course was truly unique.

Participating in this activity was very rewarding. It enriched my experience at California State University, Channel Islands.

Statistic	Value
Total Responses	5

5. Rate your overall satisfaction with this activity- 1 being lowest, and 10 being the highest score.

#	Answer	Response	%
1	1	0	0%
2	2	0	0%
3	3	0	0%
4	4	0	0%
5	5	0	0%
6	6	0	0%
7	7	0	0%
8	8	0	0%
9	9	0	0%
10	10	5	100%
Total		5	100%

Statistic	Value
Min Value	10
Max Value	10
Mean	10.00
Variance	0.00
Standard Deviation	0.00
Total Responses	5

6. Would you recommend this activity to others? Why or why not?

Text Response

I would completely recommend this experience to other students, because it really developed my interest in Conservation Biology, and that it is possible to find career paths in unique and interesting areas.

I would absolutely recommend this to anyone who asks me about it. It was a great learning experience to be a part of a project like KKP.

I would definitely recommend this activity to others. Not only was it a great learning experience with regards to research skills but it also was an amazing life experience. Being able to get so close to these magnificent whales and study them is something that very few people get to do.

I would absolutely recommend it to anybody. It was a great opportunity to enhance my understanding of field research.

Absolutely, this was a great way to obtain hands on research experience. It allowed me to explore a field of science I never considered before.

Statistic	Value
Total Responses	5

7. What do you see as the strengths of this activity?

Text Response

The strengths of this activity is that it completely pulls the student out of their comfort zone and puts them in a new environment. I feel new environments magnify the students learning process, and you leave the class with a greater knowledge and understanding.

Being able to go on the actual trip and not just doing data calculations in the lab. The semester before the trip we had the class and that was really helpful.

I think the strengths of this activity were that we were able to be fully hands on with the research data collection. We were the ones collecting the data and taking the photos, etc. It definitely gives students a chance to step up and hone their skills. Another strength of the activity was that while out on the boats doing the data collection we all were switching jobs so that everyone learned how to do each of the skills. It was very well-rounded.

This activity provided an invaluable experience for students. We were exposed to hands-on field research in a unique environment that certainly could not be replicated in the classroom.

By fully immersing the students in the field research we were exposed to a new side of research, and were able to fully delve into the subject material.

What do you think are the strengths of this activity? The hands on applications of data collection- while it is challenging, it compelled me to try to think of ways to improve the process or consider how to become more efficient.

Statistic	Value
Total Responses	5

8. What were the weaknesses of this activity?

Text Response

I would say the only weakness to this activity is organization. It is hard to maximally organize your time to complete a whole research project with one week in your area of study. I wish the activity could have been longer so that we could immerse ourselves even deeper in not only the research, but the culture surrounding the area of study.

This past semester dr Cartwright was on sabbatical the semester we went so we didn't meet up very often before going on the trip.

I think the only main weakness of this activity was that it didn't feel long enough. It didn't feel long enough for us to fully feel incorporated into the daily routine and jobs. Right when I felt like I knew how to do all the jobs and was more confident in what I was doing it was time to go home. One other weakness is the weather. You can't control the weather and one day while we were out on the water it was so choppy and rough that we couldn't collect any data and had to come in.

The only weakness is the inherent limitation on the number of students who are able to participate.

None that I can think of

Statistic	Value
Total Responses	5

9. How would you improve this activity for next time?

Text Response

The only way I would improve to activity for next time would possibly make a schedule for everyone to follow that would be an itinerary for the week in the field.

Provide more information the semester students are going.

I think that this activity was pretty great and the weaknesses can't really be improved upon because there is only one week for spring break, which is when the activity happens, and you can't control the weather.

Expanding the activity to involve more students.

Provide the class for both Fall and Spring semesters, one for planning the trip and the next for working with the data and trying to extract information out of it.

Statistic	Value
Total Responses	5

10. How well do you feel that this activity related to stated course learning outcomes?

#	Answer	Response	%
1	Course learning outcomes were clearly defined and related to the course	5	100%
2	I don't know what the course learning outcomes are supposed to be	0	0%
3	Course learning outcomes did not relate to this activity	0	0%
4	We did not discuss course learning outcomes	0	0%
5	Other (please elaborate)	0	0%
Total		5	100%

Other (please elaborate)

Statistic	Value
Min Value	1
Max Value	1
Mean	1.00
Variance	0.00
Standard Deviation	0.00
Total Responses	5

11. Any other comments?

Text Response

Best college experience I had!

This is an amazing life experience and gives students great career experience. This should continue to happen every year to give the maximum amount of students this opportunity. As a student researcher who is currently working on isotyping whale tissue, having the opportunity to witness whale behavior further stimulated my interest and curiosity in my current project. It was an overall wonderful learning experience that I will mention for graduate school purposes.

Statistic	Value
Total Responses	3