

Instructionally Related Activities Report Form

SPONSOR: Kiki Patsch

PROGRAM/DEPARTMENT: ESRM

ACTIVITY TITLE: Introduction to Geospatial Field Research on SRI

DATE (S) OF ACTIVITY: September 8-10th 2018. The trip planned for spring 2019 was cancelled by SRIRS staff. It was bumped in favor of other trips and complicated scheduling. This is the second spring in a row that this trip has been bumped in the spring which is quite frustrating.

Please submit via email to the IRA Coordinator along with any supporting documentation at david.daniels@csuci.edu within 30 days after the activity. Thank you for your commitment to engaging our students!

A. ADDRESS THE FOLLOWING QUESTIONS:

- (1) PROVIDE A DESCRIPTION OF THE ACTIVITY;
- (2) HOW DID THE ACTIVITY RELATE TO A COURSE(S) AND/OR LEARNING OBJECTIVES?
- (3) WHAT DO YOU SEE AS THE STRENGTHS OF THE ACTIVITY?
- (4) WHAT WOULD YOU SAY ARE/WERE THE ACTIVITY'S WEAKNESSES?
- (5) HOW WOULD YOU IMPROVE THIS ACTIVITY FOR NEXT TIME?
- (6) WHAT DID YOU LEARN FROM THE PROCESS?
- (7) WHAT ARE STUDENT RESPONSES TO THE ACTIVITY? ATTACH STUDENT EVALUATIONS OR ASSESSMENTS (IN ACCORDANCE WITH FERPA RESTRICTIONS YOU MUST REMOVE ALL PERSONALLY IDENTIFIABLE STUDENT INFORMATION)
- 8) GIVE A SUMMARY OF EXPENSES FOR THE ACTIVITY.

B. ATTENDEE LIST- SUPPORTING DOCUMENT:

In addition to the report form, *in a separate document*, attach to your email a list of attendees complete with each student major and grade level. This for IRA Committee reference only and will not be published on the IRA website. Include your name and the title of your IRA activity on the document.

C.IMAGES FROM ACTIVITY:

Finally, attach to your email up to 6 images demonstrating student participation (under 2 MB total) with captions/titles. Please attach these photos in .JPEG format directly to email. Thank you!

(1) PROVIDE A DESCRIPTION OF THE ACTIVITY

STUDENTS ENROLLED IN INTRODUCTION TO GIS (ESRM 328) PARTICIPATED IN A 3 DAY, 2 NIGHT VISIT TO SANTA ROSA ISLAND UNDERGRADUATE RESEARCH STATION. THE SANTA ROSA ISLAND RESEARCH STATION (SRIRS). THE HISTORICAL PHOTO-POINT ANALYSIS PROJECT WAS CREATED FOR THIS CLASS TO MONITOR AND EVALUATE THE RECOVERY OF PLANT COMMUNITIES ON SANTA ROSA ISLAND IN THE ABSENCE OF HUMAN HABITATION AND RANCHING OPERATIONS, WHICH DECIMATED THE NATIVE PLANT COMMUNITIES. MONITORING RECOVERY IS A CRITICAL PART OF DETERMINING THE SUCCESS OF RESTORATION EFFORTS AND THE IMPLEMENTATION OF FUTURE MANAGEMENT DECISIONS. THIS STUDY WILL COMPARE HISTORIC IMAGERY WITH NEW PHOTOS TAKEN BIANNUALLY BY STUDENTS TO MONITOR THE CHANGE IN GROUND COVER AND VEGETATION OVER TIME.

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

SANTA ROSA ISLAND PROVIDES A VALUABLE EXPERIENCE TO GIS STUDENTS AS THEY ARE ABLE TO USE INFORMATION GATHERED ON THE ISLAND (IN THE FIELD) AND PRODUCE A GEODATABASE AND GIS MAPS IN CLASS, WHICH WILL BE ADDED TO WITH SUBSEQUENT TRIPS BY MY STUDENTS AS WELL AS OTHERS VISITING THE ISLAND. ONE OF OUR IN CLASS LABS DEALS WITH LEARNING HOW TO IMPORT LAT/LONG POINTS FROM A GPS DEVICE INTO ARCMAP AND CREATE USEFUL MAPS. IN ADDITION, WE LEARN HOW TO IMPORT GEOLOCATED PICTURES INTO A GIS ENVIRONMENTS AND CREATE WEB PORTFOLIOS OF GEOREFERENCED IMAGES. NOW, INSTEAD OF USING DATA THEY HAVE NO ATTACHMENT TO, THEY HAVE THEIR OWN DATA AND IMAGES TO WORK WITH. THE IS AN INVALUABLE SKILL FOR THE STUDENTS. IN ADDITION, THE ESRM STUDENTS BUILD A COMRADERY ON THE ISLAND THAT IS HARD TO REPLICATE ELSEWHERE. BEFORE THE TRIP, STUDENTS ARE HESITANT TO WORK WITH ONE ANOTHER, ASK QUESTIONS, AND VENT THEIR FRUSTRATIONS TO ME AND/OR OTHER STUDENTS IN THE CLASS. ONCE WE RETURNED FROM THE ISLAND, THESE SAME STUDENTS HAD FRIENDS, ASKED FOR HELP IN LAB, TALKED WITH OTHER STUDENTS AND MAJORS ABOUT ESRM AND CAPSTONE PROJECTS AND FELT MORE COMFORTABLE APPROACHING ME FOR HELP WHEN THEY NEEDED IT. AFTER THE TRIP, I FELT I HAD A MUCH MORE UNIFIED GROUP OF STUDENTS. IT WAS UNDOUBTEDLY LIFE CHANGING FOR MANY OF THE STUDENTS (SEE REFLECTIONS).

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

THE SANTA ROSA ISLAND VISIT PROVIDED INCREDIBLE OPPORTUNITIES FOR EXPERIENTIAL LEARNING. THE STUDENTS WERE ABLE TO PARTICIPATE IN REAL RESEARCH ON THE ISLAND, BOTH OUR PROJECT, NATIONAL PARKS PROJECTS, AND OTHER CAPSTONE PROJECTS. THEY WERE ABLE TO SEE HOW INCORPORATING A GEOSPATIAL ELEMENT INTO THESE PROJECTS IS ESSENTIAL. THEY WERE ALSO ABLE TO SEE HOW THE WORK THEY DO SITTING IN THE COMPUTER LAB APPLIES TO FIELD WORK. MOST OF THE STUDENTS WERE TRYING TO THINK OF WAYS THEY COULD GET BACK OUT TO THE ISLAND. IT WAS TRULY INSPIRATIONAL TO MOST OF THEM.

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

SCHEDULING IS CONSTRAINED BY AVAILABILITY AND TIMING OF ISLAND PACKERS TRANSPORTATION TO THE ISLAND. MORE FREQUENT SERVICE WOULD BENEFIT PARTICIPANTS. ON-ISLAND TRAVEL IS LIMITED BY WALKING DISTANCE TO SITES, THUS OPPORTUNITY TO EXPLORE MORE DISTANT SITES IS LIMITED. THIS YEAR, MY SPRING TRIP HAD TO BE CANCELLED DUE TO ISLAND SCHEDULING FOR THE SECOND YEAR IN A ROW. IT WAS QUITE A DISAPPOINTMENT TO THE STUDENTS AND TO ME.

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

THE ONLY THING I WOULD DO TO IMPROVE THIS EXPERIENCE IS TO BRING MORE FOOD. THOSE KIDS CAN EAT! OTHERWISE, THE TRIP WENT OFF WITHOUT A HITCH, THANKS TO THE EXCELLENT PLANNING BY ASPEN AND ROBYN.

(6) WHAT DID YOU LEARN FROM THE PROCESS?

FROM THIS EXPERIENCE, I CONTINUED TO SEE THE MAGIC THAT SANTA ROSA ISLAND HAS TO OFFER. IMMERSION IN THIS LEARNING ENVIRONMENT ENCOURAGES STUDENTS TO MAKE CONNECTIONS BETWEEN WHAT WE ARE LEARNING IN CLASS AND REAL-WORLD FIELD WORK. BEING ABLE TO WALK THE TRAILS ON THE ISLAND AND KNOW HOW TO MAP THOSE SAME TRAILS IN GIS REALLY HELPED BRING HOME THE COURSE CONTENT. IN ADDITION, I LEARNED THE IMPORTANCE OF STUDENT COMRADERY AND BONDING. THE ATMOSPHERE OF MY COURSE BEFORE AND AFTER ROSA WAS REMARKABLE. MY STUDENTS FELT MORE COMFORTABLE NOT ONLY WITH ME, BUT WITH EACH OTHER. I ALSO THINK DISCONNECTING FROM THE MAINLAND WAS HEALTHY AND INSPIRING FOR THE STUDENTS. OVERALL, I LEARNED THAT I WANT TO REPEAT THIS EXPERIENCE FOR MY STUDENTS AS OFTEN AS POSSIBLE; THEY GOT MORE OUT OF THIS FIELDTRIP THAN I BELIEVED POSSIBLE. THANK YOU FOR THIS OPPORTUNITY.

(7) WHAT ARE STUDENT RESPONSES TO THE ACTIVITY? ATTACH STUDENT EVALUATIONS OR ASSESSMENTS (IN ACCORDANCE WITH FERPA RESTRICTIONS YOU MUST REMOVE ALL PERSONALLY IDENTIFIABLE STUDENT INFORMATION)

Here is a sampling of student reflections:

This trip to Santa Rosa Island with my GIS class was my first ever visit to the island. I am naturally interested in GIS, so I knew that I would enjoy this trip because I would learn more about the subject. But what I didn't expect, was to feel a sense of place and worthy while on the island. I am in love with my major(environmental science), but I never really felt like I knew enough or I fit in with everyone else. The island gave our class the

opportunity to meet new people and create new friendships. Aside from learning more about GIS, the friendships and bonds made while out on the island was the most important part of the trip for me. I know that if I didn't go on this trip, I would not be as comfortable as I am now with my classmates and the upperclassmen. Disconnecting from reality for a few days and focusing all my time and energy into friendships and my major was a moment in my college career that I will forever be grateful for.

The experience of a long weekend on Santa Rosa Island is an excellent way to be introduced to the course as well as to my fellow students. Because GIS is a challenging subject, to be able to see its application in a real-world, scientific setting provides motivation to work hard to learn this very practical and timely skill. Working with my fellow students as well as our professor gives me confidence to take on the challenges of the course and a heightened enthusiasm for the ESRM program. Over the weekend on the island we became a team and after returning to campus, seeing one another, it still feels like a team. One of the things I am most impressed with is the strong connection that has been built between the University and our amazing local national park. How fitting that our university shares its name with the islands!

The trip to Santa Rosa Island was a great experience, not just for the fun but also the GIS experience. I started the trip knowing just a couple people in the GIS course but I came back with friends who can also help with GIS work. Before the trip all I really knew about GIS was that it was mapping but the projects we did on the island gave me real first hand experience of a use for GIS. I grew up using a GPS to go geocaching with my family and to see real-world use for a GPS in our assignment was great. The Santa Rosa trip was one of the best experiences I have ever had and now feel prepared to take on the GIS course this semester.

The trip to Santa Rosa Island was amazing. I am an anthropology major and I was nervous about going on this trip because most of the students I went with were ESRM majors. I was also nervous about not being able to have cell phone service on the island but that changed. The whole group meshed together perfectly and we came onto the boat as strangers and quickly became friends, no one was out of place it was like we had known each other all along. I loved not having the distraction of cell service and being semi isolated for a couple days in an incredible place like Santa Rosa Island. Santa Rosa Island has some of the most beautiful views I have ever seen. It was such an amazing opportunity to not only become closer to my fellow classmates but also to be surrounded

by historical, preserved and protected lands. The island serves as a place where a sense of community and comradery is formed as well as a place for education and research. I am so thankful and lucky to go to a college that supports not only education but the networking, and bonds between students. I am so lucky to have experienced hands on GIS field work on Santa Rosa Island as part of my GIS class. The island is an oasis filled with opportunity for the public and it was a gift to be able to experience it.

Going to Santa Rosa Island this past weekend was such an amazing experience. Going to the islands is known as one of the staple ESRM trips that everyone recommends going on before they graduate. I personally have never heard a student come back from the island with a negative experience. My classmates and I went into the trip barely knowing each others names, some of us didn't even know we were in the same section. The second we got on the boat, we were already laughing and starting to bond, which only grew stronger throughout the weekend. Going on the hikes together and learning how to use GIS out in the real world together really helped us get to know each other. Since there is no cell service on the island, we were really able to connect with each other and nature in a way that is only possible on an island. Instead of all sitting around on our phones on our free time, we talked, played card games, and sang songs while people played guitar/banjo. Its rare now to have a conversation with someone that doesn't get interrupted by a text or phone call, which wasn't a problem out on the island. I feel that this trip is an important way to bond with fellow classmates as well as our professor and TA's. The trip ended with a new little GIS family, which will be super beneficial to be able to have close friends to learn with. Since most of us were all ESRM majors, we all are taking some of the same classes. This trip not only helped me make friends in GIS, but made me realize I have multiple classes with people, which will also help in other classes. Overall I had such an amazing experience, and would highly recommend that this class continues to go to the island.

This was my first time ever to any of the Channel Islands. The experience was awesome from the boat ride out to the boat ride home. The Island Packers ship was 64 ft. long and 45 tons without people and cargo. In total it can weigh in at as much as 95 tons. The captain was very willing to share his knowledge and experience with me as to the individuality of the islands as well as the marine environment. There was a naturalist on board in both directions to assist with the myriad questions we had for him and he shared photos of sightings. There are many words to describe the island itself. They could include beautiful, awe inspiring, majestic, historical and on and on. Dr. Patsch, Emily and the helpers led us to many discoveries. The natural environment is known nowhere else, from transitional mammoth and the oldest human remains, to the island fox. The history of

mans' interaction with this island is extensive, from the Chumash to the ranchers and now to us. I felt privileged to be able to help continue research and document changes to the island on this weekend trip.

The fact remains many of us would never have this opportunity if it had not been for CSUCI. We that live, work and get educated so close to the Galapagos of California, wouldn't be able to claim this as our "sense of place". Even if we were able to make this trip on our own, Santa Rosa might not have been chosen and our knowledge of the island would never have reached the limit it did.

This was my first time going to any of the Channel Islands. Even though I grew up in Ventura County all my life, I never knew that the public could go out to the islands. This trip was unbelievable. I was so intimidated by GIS and nervous to take it this semester. I knew no one in my class and was told it was like learning a new language, which has always been hard for me. But this trip changed everything. I became good friends with everyone who went, including Dr. Patsch. I am now comfortable asking for help from my cohort, the student aides, and the professor. While making friends, I realized a couple things that would prove to make GIS so much easier for me. While doing our orienteering activity, my group was talking about GIS and how intimidating it is. After talking for a while about hobbies and activities we enjoy doing, we concluded that GIS is a mash of two things. Orienteering is geocaching for photographs of places and GIS itself is photoshop of those photographs. Without meeting these incredible people and becoming so comfortable with them, I don't think I would be so confident in this class as I am now. To add to the gift that was this trip, many of these people are in other ESRM classes of mine. Now I can approach them not only about GIS but other higher division ESRM classes and I feel as though I am much more confident that I will succeed in all of my classes.

On September 7th, 2018, the night before my GIS class was to attend the field trip to Santa Rosa Island, I was struck with panic. I didn't know anyone in the class and couldn't fathom spending three days with strangers and no cellphone service. I racked my brain trying to think of excuses on how to get out of it. Should I call in sick? Make up a family emergency? Say I got in a car accident? Ultimately, I decided to attend and my time there proved to be an invaluable experience. Visiting Santa Rosa Island has benefitted me in countless ways. Mostly importantly, it allowed for an unparalleled learning experience. On the island, my classmates and I learned how to use many GIS tools, such as a compass and GPS, and track and record data points in a worthwhile way that will be used for further research and to better the national park itself. Another way my trip to Santa Rosa aided my experience in the class was how I formed many meaningful and lasting

friendships that would never have been built without the trip. It also allowed me to open up and feel more confident about myself and my abilities in a way that is hard to do in a classroom setting. Overall, the benefits of visiting the Santa Rosa Island research station are quite simply inexplicable. It is one of the things that makes CSUCI a privilege to attend. These memories will stick with me and help me to do well, not just in the introductory GIS class and the rest of my time at Channel Islands, but for the rest of my life, as well.

Through this Santa Rosa trip. I gained so much knowledge, experience, and life memories. I entered the trip nervous and unsure. I thought to myself, "This was a bad idea. I do not know anyone here and might not get along with them. Maybe I should just not show up." During the trip there were many class exercises where we were told to get in pairs or groups with people who we do not know. Through this, I had the opportunity to get to know people who I would have never talked to otherwise. One of the class projects was to GIS Map the island. We were put into random groups for that activity. My group personally worked really well together and this activity sparked my interest in the subject even more. I really liked having the beginning experience in the field and not just learning about it in a classroom. I am definitely more of a hands on learner. I left this trip not only with more of an idea what this field of work entails, but 30 new friends. This trip reaffirmed that I am in the right field.

(8) GIVE A SUMMARY OF EXPENSES FOR THE ACTIVITY.

FOOD AND TRAVEL. APPROXIMATELY \$900 ON FOOD AND BOATING/LODGING FOR SRI.

**B. ON SEPARATE DOCUMENT, PLEASE ATTACH ATTENDEE LIST
(PERSONALLY IDENTIFIABLE INFO REMOVED)**

**C. PLEASE INCLUDE UP TO 6 IMAGES AS ATTACHMENTS TO YOUR
SUBMISSION**



September 10th, 2018. Students at the end of the pier at the end of the trip. We all just finished the orienteering scavenger hunt.



September 9th, 2018. Students are watching a demonstration of an underwater remotely operated vehicle (ROV) capturing images of the sea life under the pier.



September 10th, 2018: Winners of the Orienteering Challenge! Congrats to our students. They are cheered on by station helpers.



September 9th, 2018. A portion of this trip was dedicated to collecting ground control points along the cliffs and beaches of Bechers with our RTK GPS unit. Students got hands on experience in the field with this advanced GPS technology.



September 8th, 2018. The Class just completed their first hike to the top of Cherry Canyon, and are already beginning to fall in love with the island.



September 8th, 2018. Students are getting the orientation talk at the station, excited but nervous.









