



Proposal # 775

Instructionally Related Activities Report Form

SPONSOR: KIKI PATSCH

DEPARTMENT: ESRM

ACTIVITY TITLE: INTRODUCTION TO GIS ON SANTA ROSA

DATE (S) OF ACTIVITY: SEPTEMBER 9TH – 11TH, 2018

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 This for IRA Committee reference only and will not be published on the IRA website.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. THIS 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. 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. ALL IN ALL, 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)

SANTA ROSA STUDENT REFLECTIONS

STUDENT 1

THE FIRST DAY ARRIVING TO THE SANTA ROSA FELT AS IF I WERE ARRIVING TO MY VACATION HOME. I DON'T HAVE A VACATION HOME IN REAL LIFE, BUT I CAN PRETEND TO HAVE ONE WHEN I GO TO THE SANTA ROSA ISLANDS. MEETING EVERYONE WHO WENT ON THE TRIP, INCLUDING THE PROFESSORS AND STAFF, WAS COOL AS WELL, BECAUSE EVERYONE WAS GENUINE IN THEIR OWN

WAYS AND GOT ALONG WITH ONE ANOTHER. THE BOAT RIDE ITSELF WAS TIRING TOO, BUT WE HAD THE ENERGY TO GO ON A WALKABOUT TO CHERRY CANYON. IT WAS FUN TO LEARN HOW TO USE COMPASSES, GPS, AND USING PHOTOS TO MARK CHECKPOINTS. ONE OF OUR GROUP PROJECTS THE FOLLOWING DAY WAS TO UPDATE DATA FOR THE ISLANDS. OUR GROUP CHOSE THE LOBO CANYON TRAIL, WHICH WAS QUITE AN ADVENTURE. IN THE MORNING WE PICKED UP SOME HEAVY WEATHER, THUNDERSTORM FOLLOWED THROUGH, AND LATER IN THE DAY IT GOT HUMID AND STARTED TO HEAT UP. WE CAME BY THE CANYONS WHICH WERE FASCINATING TO WATCH, HOWEVER OUR GPS FAILED AND WE COULDN'T COLLECT ACCURATE DATA, BUT THAT DIDN'T STOP US FROM DOING OUR TASK. I THOUGHT IT WAS COOL TO BE A PART OF AN IMPORTANT PROJECT AND TO DO HANDS-ON LABOR TO RETRACT IT. A SMALL GROUP OF US ALSO HAD THE CHANCE TO SEE THE HORSES THAT STILL REMAIN ON THE ISLANDS, WHICH WAS AWESOME TO SEE AS WELL. WHEN WE REACHED OUR FINAL DESTINATION, WE TOOK A NICE, RELAXING BREAK AT THE BEACHSIDE AND MADE OUR WAY BACK. THAT SAME DAY, WE ENCOUNTERED A TREMENDOUS LIGHTNING STORM. IT FELT AS IF THE ISLAND WAS BEING BOMBARDED AND WE IN THE CENTER OF ALL THE ACTION. IT GOT CLOSER AND CLOSER, AND WITH EACH THUNDER BOOMING AFTER ONE ANOTHER, IT SHOOK THE WHOLE STATION WITH ITS ROAR. NOT ONLY WAS THE FOOD SATISFYING DURING THE TRIP, BUT THE ROOMS AS WELL. ALL WAS COMFORTABLE AND SUITABLE FOR OUR TRIP AND I HAD A GREAT TIME GOING TO THE ISLANDS. I WOULD GO CONSECUTIVELY IF I HAVE THE CHANCE OF GOING AGAIN, WITH BETTER GEAR OF COURSE.

STUDENT 2

I HAVE ALWAYS WANTED TO GO TO THE RESEARCH STATION ON SANTA ROSA ISLAND SINCE MY FRESHMAN YEAR. NOW THAT I HAVE FINALLY GONE THE ISLAND DEFINITELY EXCEEDED MY EXPECTATIONS. THE WHOLE EXPERIENCE TO ME WAS LIFE CHANGING.

DUE TO THIS TRIP, I KNEW THAT I HAD CHOSEN THE RIGHT MAJOR OR MYSELF. EVERYTHING KEPT LEADING ME TO SUCH A HAPPY FEELING. FROM GOING ON A 10 MILE HIKE WITH RAIN POURING DOWN TO SWIMMING IN THE OCEAN I HAD FELL IN LOVE WITH THE ISLAND. EVERY TURN I TOOK I WOULD SEE AN EVEN PRETTIER VIEW. DURING THE TRIP I MET MANY OF MY CLASSMATES WHO I WOULDN'T HAVE MET BEFORE. THANKFULLY SINCE I HAVE MADE GOOD FRIENDS WITH MY CLASSMATES WE DO OUR BEST TO HELP EACH OTHER OUT FOR GIS HOMEWORK ASSIGNMENTS.

THIS TRIP MADE ME PERSONALLY FEEL AS IF I WAS A TRUE "ESRM MAJOR". THIS WAS DUE TO BEING IN A HOUSE AND TENT WITH OTHER STUDENTS OF THE SAME MAJOR AND ACTUALLY EXPERIENCING HANDS ON FIELD WORK. SINCE WE WENT OUT IN GROUPS HIKING AROUND THE ISLAND AND PLOTTING POINTS WITH OUR GPS I GOT A DEEPER UNDERSTANDING OF A PART OF WHAT GIS PROVIDES.

I AM VERY THANKFUL FOR THIS OPPORTUNITY, BECAUSE OF THE MANY FUN EXPERIENCES I TRULY FELT THAT ESRM IS A PROFESSION THAT I AM PASSIONATE ABOUT.

STUDENT 3

SANTA ROSA ISLAND WAS A LOT OF THINGS, MOST NOTABLY I MET SOME AWESOME PEOPLE, WENT ON AN AMAZING HIKE FOR CLASS NO LESS, AND HAD NATURE BLOW MY MIND AGAIN. BEING THE IT MAJOR IT WAS PRETTY OBVIOUS THAT I WAS OUT OF MY NORMAL SOCIAL ELEMENT GOING ON A TRIP WITH MOSTLY ESRM KIDS. HOWEVER I GOT TO MEET AND KNOW A LOT OF PEOPLE WHO I'D CONSIDER MY FRIENDS. THE GROUP THAT I DID MY DATA COLLECTION HIKE WITH I'D CONSIDER THEM SOME GOOD FRIENDS NOW. THE HIKE UP BLACK MOUNTAIN IS IN MY TOP 5 FAVORITE HIKES I'VE EVER DONE AND HAVING TO COLLECT THE DATA WASN'T TOO MUCH OF A BURDEN ON THE HIKE EITHER. ONCE WE GOT TO THE TOP WE DECIDED TO TAKE A BREAK IF ONLY FOR THE SAKE OF ENJOYING THE VIEW AND NATURE. THE NATURAL BEAUTY OF THE ISLAND WAS AMAZING HOWEVER THE SECOND HIGHLIGHT OF THE TRIP HAD TO BE THE LIGHTNING STORM AND JUST GETTING TO ENJOY THAT. OVERALL IT WAS A GOOD TRIP; I MADE FRIENDS, ENJOYED NATURE, AND I HAVE ON GOOD FAITH THAT I'LL BE USING THIS STUFF FOR CLASS. 10/10 WOULD ISLAND AGAIN.

STUDENT 4

SANTA ROSA WAS DEFINITELY AN EXPERIENCE TO HAVE, AND I'M SO GLAD I WAS ABLE TO BE PART OF IT. AT FIRST, I WAS VERY WORRIED AND ANXIOUS ABOUT THE TRIP. I KEPT THINKING ABOUT HOW I WAS NEW TO CI, AND HOW I MISSED THE OPPORTUNITY TO MAKE FRIENDS THERE. RETURNING TO SCHOOL AFTER YEARS ON HIATUS PLUS TAKING A SCHOOL TRIP THE SECOND WEEK OF INSTRUCTION DEFINITELY PAID ON THE STRESS, BUT OVERALL, I'M VERY GLAD I DIDN'T LET MY FEAR STOP ME. ONCE IN THE ISLAND, I KNEW RIGHT THERE AND THEN THAT I MADE THE CORRECT CHOICE. THE LANDSCAPE WAS BREATHTAKING, PURE, AND ALMOST LIKE A STILL FROM A VERY TALENTED ARTIST. WHAT CALLED OUT TO ME THE MOST WAS THOUGH WAS THE ROCK FORMATIONS. I KEPT THINKING ON HOW EACH LAYER WAS A STORY, A NOVEL OF EONS PAST WAITING TO BE DISCOVERED. I WOULD CLOSE MY EYES AND TRY TO HEAR THE PURE VIRGIN WIND WHISPER IN MY EARS AND IMAGINE WHAT THE CHUMASH WOULD BE SEEING AND HEARING AS WELL. THE ISLAND WAS JUST COMPLETELY TRULY MAGICAL. OVERALL, I WAS VERY HAPPY TO ATTEND AND ABOVE ALL MAKE FRIENDS WITH SOME OF MY CLASSMATES. IT WILL BE INTERESTING TO SEE EACH OTHER GROW AND DEVELOP AS WE ALL SPRINT TOWARDS OUR FINISH LINE.

STUDENT 5

REFLECTING ON THIS PAST TRIP TO THE SANTA ROSA RESEARCH STATION, I BELIEVE THAT THE TRIP UNITED MORE PEOPLE IN SIMILAR FIELDS TO EXPERIENCE A PROJECT RELATING TO THE FIELD. IN SANTA ROSA WE TOOK PHOTOS OF COORDINATES FACING SPECIFIC AZIMUTHS TO COMPARE TO PAST PHOTOS WITH THE SAME UTENSILS. RECORDING SUCH DATA CONTRIBUTES TO RECORDS OF HOW THE RESTORATION IS OCCURRING. ALONG WITH RECORDING DATA, MANY STUDENTS HAD THE CHANCE TO SEE A DIFFERENT SIDE OF CALIFORNIA THAT THEY PROBABLY HAD NOT SEEN. JUST THAT ISLAND ITSELF HAS A LOT TO OFFER FOR SOMEONE WORKING ON THEIR CAPSTONE OR JUST INDEPENDENT RESEARCH. ON THE HIKES, MY GROUPS GOT THE OPPORTUNITY TO SEE AN ISLAND

FOX, THE FORMER RANCH HORSES AND MORE OF THE SCENIC BEAUTIES OF THE ISLAND. WE HAD THE CHANCE TO SEE HISTORIC PARTS OF THE ISLAND WERE THE CHUMASH LEFT SOME ARCHEOLOGICAL PIECES AND ALSO PARTS OF THE RANCH THAT WERE DOMINANTLY USED. IT WAS MY FIRST TIME BEING ON THIS ISLAND AND HOPEFULLY NOT MY LAST BECAUSE GOING THERE OPENED UP MORE OPPORTUNITIES TO GROW IN THE FIELD. FOR ME PERSONALLY JUST GETTING THE CHANCE TO BE IN THE ISLAND WAS GREAT, BUT IT CAN DEFINITELY CHANGE SOMEONE'S PERSPECTIVE ON ENVIRONMENTAL NEEDS AND SUSTAINABILITY.

STUDENT 6

IN EARLY SEPTEMBER, I WAS GRANTED THE AMAZING OPPORTUNITY TO HEAD OUT TO SANTA ROSA ISLAND FOR THE WEEKEND FOR MY INTRODUCTION TO GIS CLASS. THIS TRIP WAS MY SECOND TIME HEADING OUT TO SANTA ROSA ISLAND. THE MORNING OF THE BOAT RIDE STARTED OFF A BIT ROCKY BECAUSE I WAS FIGHTING OFF A COLD FROM THE PREVIOUS WEEK AND FEELING NAUSEATED. HOWEVER, AFTER MUNCHING ON SOME SALTINES AND POPPING SOME MOTION SICKNESS PILLS, I WAS FEELING A SMIDGE BETTER. AFTER TWO AND HALF HOURS OF SLEEPING ON THE BOAT, OUT IN THE HORIZON LAID SANTA ROSA ISLAND. RIGHT WHEN WE LANDED, MY MOTION SICKNESS DISSIPATED AND MY ONLY THOUGHT WAS BEING A PART OF THE ISLAND. THE FIRST TIME I VISITED SANTA ROSA, I HIKE CHERRY CANYON, SKUNK POINT, AND HALF OF LOBO CANYON. THEREFORE, I WAS READY TO EXPLORE A DIFFERENT PART OF THIS MAGNIFICENT ISLAND. WHEN I HEARD OUR CLASS WAS GOING TO SPLIT UP AND HIKE DIFFERENT TRAILS, I KNEW THIS WAS MY OPPORTUNITY TO INVESTIGATE DIFFERENT PARTS OF THE ISLAND. SINCE I ONLY DID HALF OF LOBO CANYON LAST TIME, I DECIDED TO FINISH THE HIKE AND CHECK OFF ANOTHER TRAIL ON SANTA ROSA. THE BEGINNING OF OUR HIKE, THE SKY WAS NOT HAPPY AND STARTED TO DOWNPOUR ON US. THIS DEFINITELY MADE OUR HIKE AN ADVENTURE AND MEMORABLE. WHILE HIKING, WE SPOTTED THE VERY ADOPTABLE ISLAND FOX JUMPING THROUGH THE GRASS RIGHT BESIDE US. THE NAME LOBO CANYON CERTAINLY HELD UP TO ITS NAME, THE HUGE ROCK STRUCTURES WERE INCREDIBLE. BEING DOWN IN THE CANYON, I FELT SO SMALL AND INSIGNIFICANT. LOBO CANYON WAS A VERY FUN HIKE AND A GREAT OPPORTUNITY TO ESCAPE FROM REALITY FOR A COUPLE HOURS. LATER THAT NIGHT, OUR CLASS GOT TO EXPERIENCE AN AMAZING LIGHTNING AND THUNDERSTORM. ALL AROUND THE BUNKHOUSE, BIG BOLTS OF LIGHTNING WOULD LIGHT UP THE NIGHT SKY FOLLOWED BY A LOUD CRACK OF THUNDER. THAT NIGHT WAS DEFINITELY AN EXCITING AND AN UNFORGETTABLE ONE. OVERALL, MY TRIP TO SANTA ROSA WAS AN AMAZING EXPERIENCE AND A GREAT WAY TO BE ONE WITH MOTHER NATURE.

STUDENT 7

BEING OUT IN SANTA ROSA ISLAND WAS AN AMAZING EXPERIENCE THAT WAS BOTH EDUCATIONAL AND IN SOME WAYS REALLY SPIRITUAL. SPENDING THE DAYS OUT THERE WITH NO CELLPHONE SERVICE OR WIFI ADDED GREATLY TO THE EXPERIENCE, EVEN IF IT FELT DIFFICULT AND AN

IMPOSSIBLE TASK AT TIMES. HOWEVER BEING ABLE TO SPEND TIME WITH FELLOW STUDENTS AND INSTRUCTORS ON THE ISLAND WAS A TERRIFIC EXPERIENCE, AND ONE THAT WOULD HAVE BEEN DIMINISHED IF THERE WERE ACCESS TO WIFI AT THE ISLAND. BEING ABLE TO HIKE THROUGH THE CHERRY CANYON TRAIL, ALONE, WAS AN ENRICHING EXPERIENCE. THAT ALLOWED ME TO EMBRACE THE NATURAL BEAUTY OF THE ISLAND, THE QUIETNESS, AND THE SENSATION OF A LONG HISTORY THAT WAS HERE BEFORE ME. FOR THE FIRST TIME I COULD UNDERSTAND WHY THE SCHOOL THAT I'VE BEEN ATTENDING FOR OVER THE LAST YEAR IS NAMED FOR, AND FOR THE FIRST TIME I FELT CONNECTED TO THE ESRM MAJOR. HIKING THE BLACK MOUNTAIN TRAIL IS SOMETHING I WILL NEVER FORGET, NOT JUST FROM THE BREATHTAKING VIEWS, BUT ALSO FOR THE HILARIOUS MEMORIES HIKING UP THE PATH WITH MY CLASSMATES UNDER HEAVY RAIN, WIND, AND HEAT. AS BEAUTIFUL AS THE ISLAND IS DURING THE DAY, AT NIGHT THE COSMOS COMES OUT AND FELT LIKE I COULD SEE EVERY STAR IN THE GALAXY. THAT FIRST NIGHT MADE ME REALLY APPRECIATE BEING AWAY FROM CIVILIZATION, WHERE FLORESCENT LIGHTS BLOCK OUT NIGHTS NATURAL LIGHT. THIS TRIP MADE ME REALIZE HOW IMPORTANT NATIONAL PARKS ARE TO OUR SOCIETY AND TO EVERYONE THAT WANTS TO EMBRACE THEM. BEING OUT IN NATURE, UNDISTURBED BY MODERN CIVILIZATION REJUVENATES THE PRIMAL SOUL THAT CONNECTS ALL OF US TO THE ENVIRONMENT, AND SERVES ALMOST AS A RELEASE AND A REALIZATION TO THE GREAT BEAUTY AND FORCE OF THE NATURAL WORLD.

STUDENT 8

GROWING UP IN VENTURA COUNTY, I HAVE ALWAYS BEEN CURIOUS ABOUT THE CHANNEL ISLANDS. GOING TO SANTA ROSA WAS A GREAT WAY TO FINALLY SEE HOW SOME OF THE ISLANDS ACTUALLY LOOKED. I'M SUPER HAPPY I MADE THE DECISION TO GO BECAUSE I FEEL MUCH MORE COMFORTABLE BEING ABLE TO ASK FOR HELP FROM THE TA'S AND CLASSMATES. DURING OUR TIME THERE IT WAS GREAT TO FEEL LIKE WE WERE LIVING OFF THE GRID AND MORE CONNECTED IN A COMMUNITY AND IN NATURE. THE DAY WE WENT ON OUR GROUP HIKES TO COLLECTED DATA POINTS, I WAS A PART OF THE TORREY PINES CREW. WE ALL HAD AN EPIC EXPERIENCE WHICH REALLY JUST BROUGHT ALL TOGETHER A BIT MORE, AND I FEEL LIKE THOSE ARE THE PEOPLE WHO I GOT MOST COMFORTABLE WITH TOO. THE THUNDERSTORM WE EXPERIENCED WAS PROBABLY MY HIGHLIGHT OF THE TRIP. THE LIGHTNING JUST SEEMED TO GO ON FOREVER, AND WE WERE ALL TELLING SPOOKY STORIES WHICH WAS JUST SO COMPATIBLE WITH THE STORM. THE BOAT RIDE BACK WAS REALLY AWESOME TOO! THAT CAVE WE GOT TO SEE WAS EPIC, AS WELL AS SEEING THE DOLPHINS TRAILING OUR BOAT. OVERALL THE SANTA ROSA TRIP WAS SOMETHING I WON'T FORGET DOING FOR THE FIRST TIME EVER. IT WAS A GREAT WAY TO START MY FIRST SEMESTER AT CI.

STUDENT 9

IN EARLY SEPTEMBER OF 2017, I HAD THE PRIVILEGE OF GOING OUT TO THE SANTA ROSA ISLAND RESEARCH STATION WITH MY GIS CLASS. THIS WAS MY FIRST TRIP OUT TO SANTA ROSA ISLAND, AND IT WAS NOTHING SHORT OF LIFE ALTERING. I EXPECTED TO GO ON HIKES AND

COLLECT DATA, BUT I DID NOT EXPECT TO BUILD AS MANY FRIENDSHIPS AS I DID. SINCE GOING ON THIS TRIP, I FEEL THAT I AM TRULY AND COMPLETELY A PART OF THE ESRM COMMUNITY, FINALLY, AFTER THREE YEARS AT CSUCI.

THE CAMARADERIE WE ALL SHARED WAS GLUED BY OUR MUTUAL LOVE AND RESPECT FOR THE EARTH AND ENVIRONMENTAL STEWARDSHIP. BEING SURROUNDED BY LIKE-MINDED INDIVIDUALS IN A MOST PRISTINE NATIONAL PARK WAS A GIFT AND A PRIVILEGE THAT I WILL ALWAYS HOLD CLOSE TO MY HEART. HAVING THE OPPORTUNITY TO DO FIELD WORK ON AN ISLAND THAT IS SO IMMACULATE THAT IT APPEARS UNTOUCHED WAS ABSOLUTELY PRICELESS. I WILL BE GLEEFULLY RETURNING TO SANTA ROSA ISLAND AS SOON AS ANOTHER OPPORTUNITY PRESENTS ITSELF.

STUDENT 10

AT FIRST I WASN'T SURE WHAT TO EXPECT, BEING THAT IT WAS MY FIRST TRIP OF THE SEMESTER WITH A CLASS THAT I'VE NEVER SEEN OR SPOKEN TO IN MY LIFE. I WAS ALSO NERVOUS ABOUT NEVER DONE THIS TYPE OF RESEARCH SO I WASN'T SURE IF I WAS COMPETENT ENOUGH TO BE GATHERING DATA FOR FUTURE RESEARCH. HOWEVER BY THE END OF THE TRIP THE ISLAND AND THE BONDS MADE, MADE THAT ALL GO AWAY.

DR. PATCH ASSIGNED US TASKS THAT GATHERED DATA ON THE ISLANDS VEGETATION GROWTH THROUGHOUT SPECIFIC AREAS THAT HAVE BEEN RECORDED SINCE 2013. THE DATA WAS COLLECTED BY TAKING PICTURES WITH A GPS CAMERA AT SPECIFIC ANGLES AND POINT'S IN ORDER TO TRACK AN ACCURATE MEASUREMENT. FORTUNATELY WE WERE ABLE TO GO ON AN EXCURSION TO THE SOUTHWEST CORNER OF THE ISLAND. THIS LOCATION IS HOME TO THE TORREY PINE TREE, A TREE THAT ONLY GROWS IN TWO PLACES IN THE WORLD. THIS HIKE WASN'T LONG BUT OUR GROUP TOOK "SHORTCUTS" THAT MADE US KNOW THE ISLAND A LOT MORE AND GAVE US EXPERIENCE ON WHAT NOT TO DO NEXT TIME.

THE DAYS WEREN'T LONG BUT THEY WERE TIRING AND FUN, DUE TO THE EXCITEMENT OF BEING ON A DESERTED ISLAND. I ALSO ENJOYED HOW THE TEAM THAT WENT BECAME ACCOUNTABLE AND THEY'RE FOR ONE ANOTHER. ON OUR LAST DAY ONE OF THE TEAMS WEREN'T ABLE TO GET ALL THE DATA POINTS ON ONE OF THEIR HIKES. SO IN ORDER TO FINISH THE RESEARCH VOLUNTEERS JOINED THEM TO GATHER THE DATA BEFORE THE FERRY LEFT. IT WAS BEAUTIFUL TO SEE EACH OTHER HELP OUT AND BE PART OF THAT.

SANTA ROSA WAS AN EXPERIENCE THAT GAVE ME APPRECIATION FOR WHY I CHOOSE TO BE AN ENVIRONMENTAL SCIENCE MAJOR. I WASN'T SURE WHAT TO EXPECT WHEN I FIRST STEPPED OFF THE FERRY ONTO AN ISOLATED ISLAND. ALL THIS SAID THE OUTCOME OF THE TRIP WAS A BOND WITH THE CLASS WITH THE ISLAND AND WITH MY FIELD.

8) GIVE A SUMMARY OF EXPENSES FOR THE ACTIVITY.



**INSTRUCTIONALLY
RELATED
ACTIVITIES**

**C H A N N E L
I S L A N D S**

GRANT PROVIDED TRANSPORTATION AND FOOD EXPENSES TO SANTA ROSA ISLAND FOR 29 STUDENTS & 1 FACULTY FOR 1 WEEKEND IN THE FALL OF 2017. THE SPRING 2018 TRIP WAS CANCELLED DUE TO SCHEDULING AND OVERCROWDING. HOPEFULLY, IN THE FUTURE, WE WILL FIGURE OUT A BETTER WAY TO SCHEDULE IRA FUNDED TRIPS TO THE ISLAND.

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

C. PLEASE INCLUDE UP TO 6 IMAGES AS ATTACHMENTS TO YOUR EMAIL SUBMISSION
SEE ATTACHED

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.