

Undergraduate Research Symposium Schedule – Spring 2018

[Agreed to moderate]

	Espino A	Espino B	Espino C	Espino D	UC 210	Foyer: Posters
12 pm to 12:50	<i>Theron Francis' World Literature Class:</i> Melissa Morales Briana McCutcheon Walt Flocke Chase Horton	Erin Bittner <i>(Richter)</i>	Anavelee Rayos <i>(Peddie)</i>	Adrian Salmon <i>(Richter)</i>		<i>Trotman's Experimental Psychology Class</i>
		Krysta Armstrong <i>(Richter)</i>	Michelle Ramos <i>(Peddie)</i>	Donna Glenn <i>(Fairlie)</i>		Darla-Nicole Acosta, Alexis Amancio, Amanda Carillo, Hannah Flores, Kaylee Plowman & Ashley Preston
		Ryan Pearson <i>(Richter)</i>		Bree Henderson Kendra Miller <i>(Barrientes)</i>		
	<u>Moderator: Francis</u>	<u>Moderator: Richter</u>	<u>Moderator: Peddie</u>	<u>Moderator: Barrientes</u>		<u>Moderator: Trotman</u>
1 pm to 1:50	<i>Ken Laviers' Computer Science Class:</i> Lance Goarin Shawn Templin Carlos Medina Fredrick Lindsey	Katherine Mancha <i>(Ritzi)</i>	Alyssa Longoria <i>(Wilde)</i>	Malyssa Cospers <i>(Qvarnstrom)</i>	Michelle Ramos <i>(Velasco)</i>	<i>Tiffany Culver's Psychology Student Posters</i>
		Jesus Guerrero <i>(C. Graham)</i>	AnnDee Alvidrez <i>(Wilde)</i>	Derek Rasor <i>(Richter)</i>	April Crowder <i>(Velasco)</i>	
		Brittany Thompson <i>(Leaver)</i>		Timothy Dzida <i>(Freed)</i>	Chani Spear <i>(Velasco)</i>	Gabriel Villarreal Ernesto Flores
		William Serrano <i>(Jorgenson)</i>			<u>Moderator: Velasco</u>	
	<u>Moderator: Laviers</u>	<u>Moderator: Leaver</u>	<u>Moderator: Briseno</u>	<u>Moderator: Richter</u>		
2 pm to 2:50	<i>Diana Rodriguez' team of student-teachers</i> Selena Garcia Arlene Pando Ernie Rivera Angalyn Latin	<i>Dona Roman's Theatre Students</i>	<i>Theron Francis: Professional Writing Teams</i>	<i>Laura Payne's Creative Writing Class</i>		
		Westin Huffman, Fight Captain and Choreographer	TEAM 1: Brittney Patterson Scott Martinez Brandt Buchanan	Amanda Starkes Christy Sanchez Jesus Luna Abbegail Alvarez Matthew Ramirez		
		Michael Amerson, David Altamirano Garcia, Cory Hill, Eddie Molinar	TEAM 2: Natalie Guillen Ysabel Aguilera Dakota Wilbourn Jamil Gentry Jacob Zavala	<u>Moderator: Payne</u>		
	<u>Moderator: Rodriguez</u>	<u>Moderator: Roman</u>	<u>Moderator: Francis</u>			



SUL ROSS STATE UNIVERSITY – ALPINE CAMPUS & RIO GRANDE COLLEGE

UNDERGRADUATE RESEARCH SYMPOSIUM SCHEDULE – SP 2018

12:00 PM TO 12:50

ESPINO A

MELISSA MORALES, BRIANA MCCUTCHEON, WALTER FLOCKE & CHASE HORTON

Theron Francis' World Literature Class

MELISSA MORALES: "THE ROLE OF EDUCATION IN WOMEN'S RESILIENCE IN PETINA GAPPA'S ZIMBABWE"

BRIANA MCCUTCHEON: "DIVORCE: A FORBIDDEN RIGHT"

WALTER FLOCKE – "SACRIFICE AND HEROISM IN AN IMPERIALISTIC CULTURE: A LITERARY ANALYSIS OF LEO TOLSTOY'S HADJI MURAD"

I will be discussing the significance of sacrifice and death to the greater meaning of the novel Hadji Murad, by Leo Tolstoy. I will use quotations from the book, and interpret their significance in the context of Russian culture, as well as in the context of war and borders. Although the presentation is about Hadji Murad, I will briefly allude to similar cases of war and heroism in western culture, particularly in the border regions of Texas.

CHASE HORTON – "BLANKETS OF HUMOR IN THE HAIKU OF KOBAYASHI ISSA"

Issa uses a comedy to mask true emotions, personal difficulties, and insecurities. This mask blankets pain with humor.

ESPINO B

ERIN BITTNER – "MINERALS AND HUMAN DEPENDENCY ON THEM"

Professor: Dr. Francine Richter

This research explores the impact of minerals on past and present societies and their significance to industrial, economic, and health sectors. The aim is to educate the public on the importance of minerals in everyday life. The world/societies, without minerals or even certain minerals, would be vastly different from the one we live in today.

KRYSTA ARMSTRONG – "TEACHING MATH IN ELEMENTARY SCHOOL"

Professor: Dr. Francine Richter

"Interdisciplinary education can not only improve students' higher-order thinking skills and motivation for learning, but also to provide opportunities to understand knowledge from multiple perspectives and



assist in the transfer of learning," according to An Song, a professor at the University of Texas. Researchers have discovered benefits for teaching mathematics integrated with science and language arts. This Interdisciplinary connection provides students with the opportunity to make sense of mathematics and apply their mathematics knowledge in meaningful ways by connecting new knowledge to existing knowledge.

RYAN PEARSON – “PALEONTOLOGY AND THE SPINOSAURUS”

Professor: Dr. Francine Richter

“This prehistoric creature is the most dangerous predator living in the river” (Petit 1). The first water-dwelling dinosaur to ever be discovered, it is called Spinosaurus. Named after its seven-foot-long spine, the spine lizard lived in the Cretaceous period about one hundred million years ago (Petit). According to Zachary Petit, an author for National Geographic, “It inhabited what is now North Africa’s Sahara region” (1). In this area, the Spinosaurus was about fifty-feet long and preyed upon fish that were the size of cars. Many scientists were shocked at first because it was able to live and thrive on land just as much as it could in the water. Many scientists and others are saying it is the biggest carnivorous dinosaur to live on land, even bigger than the T-rex and the gigantosaurus (Petit 3). Paleontologists today are fascinated with researching the Spinosaurus because it has been previously lost to history by becoming extinct twice; they could be ancestors of the modern-day crocodile; and they are unique in the world of ancient reptiles.

ESPINO C

ANAWELEE RAYOS – “THE LUXURIES OF BEING A WOMAN”

Professor: Dr. Ian Peddie

The essay that I will be presenting will be about the unnecessary taxation of menstrual hygiene products in the United States. The taxation of these products is a form of oppression that women experience unknowingly due to the fact that mainly women purchase menstrual products. Although some states have already removed the tax, the rest of the United States should take action as well.

MICHELLE RAMOS – “THE SIGNIFICANCE AND APPLICATION OF T.S. ELLIOT’S THE WASTE LAND”

Professor: Ian Peddie

This paper seeks to articulate the rhetorical significance and application of T.S. Elliot's *The Waste Land*. Through the construction of a metaphorical waste land by employing fragmented voices and allusive material, Eliot pronounces the inherent despair in post-world war Europe. In this essay, the disembodied voices and fragmented meaning within the work are cohesively discussed for modern translation and application.

ESPINO D

ADRIAN SALMON – “THE POWER OF PSYCHOTHERAPY AND ARTS”

Professor: Dr. Francine Richter



“Trauma does not disappear in the first telling of its horror” (Olney 143). It takes the right expertise and mental exercises to help heal the person. Forms such as projective drawing or word drawback can help the patient to better restrain their fear and control the emotions the best they can. Whether it is veterans that suffer from PTSD or a teenager going through domestic violence, trauma affects patients and causes hindrance in their everyday life. Through the practices of psychology and psychotherapy, psychotherapists can help the brain to heal. The role of psychotherapy has declined, yet the availability of pharmaceutical agents don’t seem to have reduced in the slightest. Conversations with psychiatrists and medical practitioners has shown that there are benefits to this kind of treatment as opposed to prescription drugs. By using art, holistic approaches, and psychotherapy treatments as opposed to prescribing prescription drugs, psychotherapists will ultimately help trauma patients heal in a healthier, more efficient way.

DONNA GLENN – “COLORS OF THE PSYCHE”

Professor: Carol Fairlie

When Donna creates a painting, she interviews willing participants with different Post-Traumatic Stress disorders or Mental disorders and asked them to describe the way they saw their own worlds. Each painting is a basic abstract form of the answered questions. Many of the paintings are done with her hands as well as the brush strokes are for finer and cleaner detail. Some of these paintings were experiments with surprising effects, using turpentine to strip parts of the canvas of its color. With each painting she aspires to show others a new perspective and understanding of what is transpiring inside the mind of someone consumed by suffering. Donna also tries to illustrate the tragic beauty in suffering minds and how people strive to emerge from the pits they have found themselves, in hopes of finding something better than the pain they’ve always known..

BREE HENDERSON & KENDRA MILLER – “THE COMMON GOOD AS INCLUSIVE IN THE MISSION OF THE UNIVERSITY”

Professor: Benjamin Barrientes

The Common Good. In a presentation, Charles Dorn examines the concept of "The Common Good" within the context of American Education. We will examine the concept of the common good within the context of individuality.

FOYER (POSTER PRESENTATIONS)

ALICIA TROTMAN’S EXPERIMENTAL PSYCHOLOGY STUDENTS

DARLA-NICOLE ACOSTA – “CHARACTERISTICS OF EATING BEHAVIORS IN A RURAL FOOD DESERT: A QUALITATIVE STUDY AMONG UNIVERSITY STUDENTS”

Eating behaviors can change for individuals based on where they lived, how long they lived there and family or cultural traditions. These characteristics change in college students in their first four years. Can living in a rural area affect and alter the characteristics of their eating behaviors and can they gain the knowledge to change how they first made their decisions when consuming foods? This study will address this question focusing on student’s classification (freshman, sophomore, etc.) and their eating habits in a rural desert.



ALEXIS AMANCIO – “EXPLORATION OF THE RELATIONSHIP BETWEEN PERCEPTIONS OF BEHAVIORS ASSOCIATED WITH AUTHORITY LEVELS AND BOUNDARY VIOLATIONS”

AMANDA CARILLO – “PORTRAYING A FULLER PICTURE: THE LASTING EFFECTS ON YOUNG ADOLESCENTS AFTER LEAVING A POSITIVE PEER CULTURE (PPC) PROGRAM”

The purpose of this study is to uncover adolescents' perceptions because despite the number of positive claims researchers have identified, there is no consistent review about how adolescents apply their learning after leaving the Positive Peer Culture (PPC) program. Some of the characteristic discussed are caring, mutual respect, connection to adults, problem-solving, focus, code of openness, and peer helping as values taught to adolescents who attend PPC programs. In my study, I hope to find a relationship between the program and adolescents' life-long learning in their lives.

HANNAH FLORES – “THE CORRELATION OF EGO-RESILIENCY ON ACADEMIC PERFORMANCE AND RELATIONSHIPS THROUGHOUT THE COLLEGE EXPERIENCE”

The purpose of this study is to determine how ego-resiliency correlates with academic performance. This study explores the relationship between perceived relationships, ego-resiliency, and academic performance. The expected outcome is a positive correlation between perceived quality of relationships, ego resiliency, and academic performance.

KAYLEE PLOWMAN – “ART-BASED INTERVENTION EFFECTS TO REDUCE STRESS LEVELS AND PROMOTE PRODUCTIVITY”

The purpose of this research project investigated the relationship between art and stress in college students at Sul Ross State University. This study explored the relationship between variant amounts of stress within an individual before and after exposure to an artistic intervention and reports on the degree to which participants found the intervention beneficial to decrease levels of stress/anxiety and increase productivity through creation.

ASHLEY PRESTON – “SOCIAL MEDIA ENGAGEMENT AND PERSONALITY TYPE RELATING TO FEAR OF MISSING OUT (FOMO)”

The goals for this correlational study explores the correlation between social media and Fear of Missing out (FoMo), or loneliness. This study investigates the effects of social media including if one really has a fear or missing out family and/or friends' activities and events, or anything else that happens in the internet world. This study hopes to report that social media can take over our lives and our feelings and without monitoring excessive usage, the impact can be negative.



1:00 TO 1:50 PM

ESPINO A

LANCE GOARIN, SHAWN TEMPLIN, CARLOS MEDINA & FREDRICK LINDSEY –
“GALACTIC ASSAULT: THE GAME”

Ken Laviere’s Computer Science Class

Students demonstrated a novel method of game control. They were able to create a game that quickly and smoothly transitions from 3D to 2D to provide a very unique gaming experience.

ESPINO B

KATHERINE MANCHA – “POST-BURN ANALYSIS OF INSECT DIVERSITY AT THE
CHIHUAHUAN DESERT RESEARCH INSTITUTE, JEFF DAVIS COUNTY, TEXAS”

Professor: Dr. Chris Ritzi

A previous study in 2006 was conducted at the Chihuahuan Desert Research Institute in order to document the pollinator community associated with the various plants and habitats here in west Texas. In 2011, the Rock House fire burned through the area, wiping out not only the vegetation, but also the majority of pollinators in the area. Six years later, we conducted a study in order to see how pollinator community has recovered, and to compare it to earlier pre-burn and initial post-burn data.

JESUS GUERRERO – “TESTING THE ANTIMICROBIAL CAPACITY OF AMPHIBIAN
SALIVA”

Advisor: Dr. Kelehear Graham

For this project, an analysis of cane toad salivary secretions was conducted to test for inhibition of microbial growth. The toads that are being tested are all female and originally from South America (Guyana and French Guiana). Their salivary secretions were added to discs of filter paper and then added to microbial lawns containing bacteria isolated from crickets (*Grylodes sigillatus*) – a common prey item for these insectivorous toads. So far, no inhibition has been seen. The procedure has been redesigned to increase the concentration of the salivary secretions to test whether or not inhibition will be seen.

BRITTANY THOMPSON – “PROGRESS MADE TOWARDS THE SYNTHESIS OF 4-
CYCLOPROPYLIDENE-CHOLESTAN-3-ONE AS A POTENTIAL INHIBITOR OF
PARASITIC NEMATODES”

Professor: Dr. David Leaver

Soil-transmitted helminth (STH) infections are common infections worldwide affecting human health and the drugs currently used are developing drug resistance. Sterol A-ring methylase-1 (STRM-1) is an attractive drug target since helminths are incapable of de novo sterol biosynthesis. The synthesis for a proposed STRM-1 inhibitor (4-cyclopropylidene-cholestan-3-one) starting from cholesterol will be outlined including progress made thus far.



WILLIAM SERRANO – “PROJECT ABSTRACT OF BOWSTRING ARCHED VERTICAL-LIFT BRIDGE”

Professor: Dr. Kris Jorgenson

This project will cover the balance of forces being enacted on an arched bridge. This bridge will have the ability of vertically lifting the center deck of the bridge using the bridge’s arches as support. This project will give insight to how fragile a bridge could be with the design ideas of how to overcome such obstacles in a (center-deck) vertical-lift arch bridge. The 3D design will be composed of Popsicle sticks, hot glue, string, rollers, and batteries (as counter-weights).

ESPINO C

ALYSSA LONGORIA– “AN EXPLORATION USING INTERVIEWS AND MUSIC TO DISCOVER HOW ANXIETY AFFECTS STUDENTS' LIVES AND CAREERS”

Professor: K. Megan Wilde

Anxiety is one of the most common mental health problems on college campuses, and yet most students suffer silently and alone. Alyssa's radio feature uses interviews and powerful original music to explore how anxiety affects students' lives and academic careers and how students cope with this disorder. Her story approaches an important campus mental health issue with compassion and creativity, shining an empathetic light on students who are struggling and hoping for a better life.

ANNDEE ALVIDREZ – “A HEART-WARMING TRIBUTE TO MY GRANDMOTHER”

Professor: K. Megan Wilde

AnnDee's well-crafted radio feature is a heart-warming tribute to her grandmother, who was a leader in her family and the small border community of San Elizario. Family members share their memories of this remarkable matriarch, her contributions to their lives, and her importance in their town. AnnDee's sweet audio portrait leaves listeners teary-eyed and missing their own abuelas, as her relatives recall the final lessons she imparted during her brave battle with cancer.

ESPINO D

MALYSSA COSPER – “TECHNOLOGY IN THE MUSIC CLASSROOM; WHY SHOULD WE IMPLEMENT IT AND HOW CAN WE USE IT EFFECTIVELY”

Professor: Dr. Jeanne Qvarnstrom

This presentation will explore the importance of integrating technology in the music classroom based on a literature search. Education theories and learning styles will be examined and compared to the modern student and their use of technology. Specific applications and programs have been investigated, analyzed, and described. This presentation will also explore how to use the investigated applications and programs in the music classroom by giving specific examples and scenarios.



DEREK RASOR – “PSYCHEDELICS: A POTENTIAL MENTAL HEALTH REVOLUTION”

Professor: Dr. Francine Richter

Psychedelics, though currently illegal and taboo in today's culture, have great potential in the field of clinical psychiatry with their beneficial effects on depression, substance addiction, and spirituality, among many other facets. Considered sacred medicines by many indigenous cultures throughout history, psychedelics have a lengthy track record of imparting beneficial effects on the individual, as well as the culture as a whole, when administered under well-established, supportive conditions. The reliability to produce such transformative states of consciousness, that many people rate as one of the most significant experiences of their lives, provides potential for one of the greatest leaps in clinical psychiatry yet.

TIMOTHY DZIDA – “BEETHOVEN’S MASS IN C MAJOR”

Professor: Dr. Donald Freed

This paper discusses Beethoven’s infamous Mass in C Major and the rationale behind dismissal of the piece. It looks over the piece analytically (in terms of musical structure) as well as understanding what Beethoven may have been thinking when he composed the piece. The Mass is an important piece of repertoire that needs recollection. The research paper discusses why understanding is key as related to the rest of his works, as well as who he wrote the work for and his feelings towards it.

UC 210**MICHELLE RAMOS – CULTURE AND BODY IMAGE IN U.S. WOMEN**

Professor: Dr. Joseph Velasco

Western societies, especially the United States, place great emphasis on physical appearance. This literature review examines cultural effects of various mediated messages on beauty.

APRIL CROWDER – “EXPLORING THE RELATIONSHIP BETWEEN STRESS AND DEPRESSION”

Professor: Joseph Velasco

According to Diagnostic and Statistical Manual of Mental Disorders (DSM-V), “Depressive disorder is a mood disorder characterized by the presence of sad, empty or irritable mood, accompanied by somatic and cognitive changes that significantly affect the individual's capacity to function.” Depression is one of the most costly yet common psychological illnesses in our society that is becoming a lot more prevalent in young adults. This paper reviews the literature exploring the relationship between stress and depression.

CHANI SPEAR – “CHALLENGES TO STEPFAMILY COMMUNICATION”

Professor: Dr. Joseph Velasco



This study explored the communication challenges stepfamilies face. A thematic analysis revealed four stepfamily relational challenges: feeling caught, sabotage, stepmother difficulties, and feeling discarded. Three parenting challenges were also uncovered: transition to parenthood, discipline, and parent-labels.

FOYER (POSTER PRESENTATIONS)

TIFFANY CULVER'S PSYCHOLOGY STUDENTS

GABRIEL VILLARREAL AND TIFFANY CULVER – “CRIMINAL MINDS: A GLIMPSE INTO THE LIFE OF RICHARD KUKLINSKI”

Eating behaviors can change for individuals based on where they lived, how long they lived there and family or cultural traditions. These characteristics change in college students in their first four years. Can living in a rural area affect and alter the characteristics of their eating behaviors and can they gain the knowledge to change how they first made their decisions when consuming foods? This study will address this question focusing on student's classification (freshman, sophomore, etc.) and their eating habits in a rural desert.

ERNESTO FLORES AND TIFFANY CULVER – “FORENSIC FILES: AN INVESTIGATION OF BILLY MILLIGAN”

Researchers classify perpetrators into categories to help identify patterns of behavior. These patterns allow researchers and investigators to determine signs of future perpetrators and also determine suspects once a crime has been committed. Do perpetrators fit neatly into these predetermined categories?



2:00 TO 2:50 PM

ESPINO A

DIANA RODRIGUEZ’ TEAM OF STUDENT-TEACHERS

SELENA GARCIA, ARLENE PANDO, ERNIE RIVERA, ANGALYN LATIN

This group is a cohort of four prospective teachers. They have been working on an empirical/ service learning project in an elementary mathematics classroom.

ESPINO B

DONA ROMAN’S THEATRE STUDENTS

WESTIN HUFFMAN, FIGHT CAPTAIN AND CHOREOGRAPHER

MICHAEL AMERSON, DAVID ALTAMIRANO GARCIA, CORY HILL, EDDIE MOLINAR

“STAGE COMBAT: A PRACTICAL APPLICATION”

Sul Ross theatre students present various stage combat techniques as used in their current production of *The Man of La Mancha*.

ESPINO C

PROFESSIONAL WRITING TEAMS

Advisor: Theron Francis

BRITTNEY PATTERSON, SCOTT MARTINEZ & BRANDT BUCHANAN – “COLLEGE STUDENT’S ACCESS TO VOTING AT SUL ROSS

In an effort to understand low voter participation among Sul Ross students at the University's Alpine Campus we will survey the students on campus to see if improved access to polls would significantly increase participation. The information gathered will be assembled into a simple white paper to provide elections officials and other interested parties metrics that may be used to determine polling locations.

NATALIE GUILLEN, YSABEL AGUILERA, DAKOTA WILBOURN, JAMIL GENTRY & JACOB ZAVALA – “STUDENT DEMOGRAPHIC VOTING PATTERNS”

Our group will be presenting the results of our student demographic voting survey. We will contrast ethnicity, age, gender, economic class, and political affiliation for voting amongst Sul Ross students. This presentation will show the differences between each topic listed and how they each correlate with voting.



ESPINO D

AMANDA STARKES, CHRISTY SANCHEZ, JESUS LUNA, ABBEGAIL ALVAREZ & MATTHEW RAMIREZ - "SHORT FICTION, THE WAY WE COME TO STORIES"

Laura Payne's Creative Writing Class

AMANDA STARKES - "MOTH AND THE WINGS OF KALMERA"

CHRISTY SANCHEZ - "WHERE I GO DEATH ALWAYS FOLLOWS"

JESUS LUNA - "ROLLER COASTER"

ABBEGAIL ALVAREZ - "THE RIGHT HER"

Using Pam Holston's second-person narrative point of view, I decided to write a piece on finding love in college.

MATTHEW RAMIREZ - "THE RE-UP"

A short story modeled on Edgar Allan Poe's techniques.