Western Oregon University

Digital Commons@WOU

2019-05-30

2019 Academic Excellence Showcase Abstracts

Western Oregon University

Follow this and additional works at: https://digitalcommons.wou.edu/aes

Academic Excellence Showcase Abstracts 2019

June 30, 2019 — Western Oregon University

Session: 1. Academic Excellence in Dance

Oberst, Sharon

Aeolian: 2018-2019 Guest Artist Presentation

Robin Evers, Emily Fleming, Lauren Foster, Gabi Hamlin, Jade Mong, Jenna Perin, Ramon Rodriguez, Moises Martinez- Trejo Aeolian was created by Guest Artist, Anjali Austin, and the dancers. Ms. Austin is a Professor, Interim Chair and Graduate Program Director in the School of Dance at Florida State University. The dancers auditioned and were selected by Professor Austin to work collaboratively with her to create the dance in a single week in October. The work premiered at the American College Dance Association conference at the University of Utah on March 14, 2019 and was performed in the WOU Spring Dance Concert May 9, 10, 11, 2019.

Mentor(s): Oberst, Sharon

Hardesty, Monica

Dance Performance: M.O.M

My piece M.O.M was influenced by a personal experience of struggling to have a healthy adult relationship with my mother. I was very inspired by the idea of the transition into adulthood and how some parents have a hard time facilitating that transition. The performers in this piece are Robin Evers, Moises Trejo, Gabi Hamlin, and Jade Mong.

Mentor(s): Garner, Cynthia

Evers, Robin

Everyday Wasted

Everyone has a vice or a coping mechanism to help them through life when the going gets tough, but what happens when you left your vice control your life? This dance reflects one's personal struggle of wasting away the days. Trapped, scared, controlled, and tired of the highs and lows. You still end up wasting everyday, wasted.   Dancers: Allison Englestad, Monica Hardesty, Kayley Kildea, Faithe Maher, Megan McCall, Jesse Rivera, Cheyenne Taylor Music / Composer : Presudeos / Alon Mor

Mentor(s): Thomas, Darryl

Rodriguez, Ramon

Hermanos

Hermanos is a story about two immigrant brothers in their journey through a nation whose administration does not recognize their humanity. As Latinxs they are faced with hate and discrimination for who they are what they look like. In spite of these adversities, their care for each other keeps th

em going. That's all they have and that's all they need.

Mentor(s): Garner, Cynthia

Evers, Robin

Lulu Sweigard's Ideokinesis

Is it possible to learn dance just by closing your eyes and thinking about it? Lulu Sweigard would argue so. Her concept of ideokinesis and discovery of nine lines of movement tell us how. This presentation reveals that practice doesn't always make perfect,here is value in non-doing.

Mentor(s): McDonnell, Amy

Session: 1. Alternative Break

Gonzalez, Suleidi;Moore, Ellen;Avila Lara, Jennifer;Williams, Morgan;Nakatsukasa, Caitlyn;Regalado Pina, Maria

Alternative Break-Spring 2019

Three teams were given the opportunity to serve with the Alternative Break Program during Spring Break 2019. Team members partnered with volunteer organizations in various locations to gain hands-on service learning experiences in different cultures and engage with local and global communities by volunteering with partners. Each team were focused on a specific social justice area of concern and explored root causes relative to the topic, learn the importance of active citizenship, and reflect on the experiences and apply them to their own values and future goals. Our team focused on educational access which taught us about inclusivity and equitable quality education that helps promote lifelong learning opportunities for those affected. Our time with the Alternative Break Program prior, during, and after the trip challenged us to grow professionally and personally, which helped us see the world through a different perspective and continue to raise awareness through our experiences. The presenters are: Caitlyn Nakatsukasa Maria Regalado Pina Suleidi Gonzalez Ellen Moore Jennifer Avila Lara Morgan Williams

Mentor(s): Break, Alternative;Chan Tuyub, Zoe

Session: 1. Behavioral Sciences Poster Session

Muñoz Villarreal, Blanca

Accents and Hiring

The study aimed to investigate the correlation between Spanish, Japanese and US English accents regarding hiring preferences. Western Oregon University undergraduate students were recruited via SONA. Participants filled out a consent form and were told the purpose of the study. Participants then, randomly selected a number from a cup corresponding to the specific audio recording of an applicant with either a Spanish, Japanese or US English accent. Once the number was selected, participants listened to the corresponding audio recording with the intentions of either

recommending or not recommending for hiring of the applicant. Participants then completed survey questions as well as free response questions and were debriefed about the study. Overall, results from the study have not been determined as the research remains ongoing. However, results for the study are expected to suggest a correlation between a lower recommended rate for hiring for Spanish accented individuals compared to a higher rate for hiring for US English accented individuals due to subjectiveth comprehensibility of the potential employer.

Mentor(s): King, Brent

Peterson, Kira

Social Media's Impact on the Mental Health of Young Adults

With the current rise in popularity of Social Media throughout the past decade, it may have an impact on the development of young adults and their mental health. This study sets out to find any possible correlations between Social Media use and depression, anxiety, and self-esteem levels in the young adult population. I hypothesize that the time young adults spend on Social Media will be directly correlated with their depression, anxiety and self-esteem. Participants between the ages of 18 and 30 filled out an online survey consisting of questions about social media use and their current mental health. The Depression Anxiety Stress Scales 21 (DASS-21), and the Heatherton Self-Esteem Scale were used to measure the mental health levels in the participants. Participants were also asked about how much time they spend on Social Media sites and which ones they use most often, along with how they access these sites and why. At this time, the data collection and analysis processes are still occurring, but will be concluded at the time of the presentation.
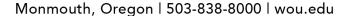
Mentor(s): King, Brent

Roell, John

Affect Of Color On Memory

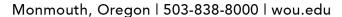Mentor(s): King, Brent

Viegas, Taylor

African American Predisposition to Sentencing

This study was designed to explore the current perception college students have in regards to tattoos. A survey was given that either had a photograph of a male with tattoos, or the same male without tattoos, or a female with tattoos or the same female without tattoos. Three questions were asked in response to the photograph. Following the photograph, an adapted version of the Martin Stigma Against Tattoos Survey was used in order to examine the current perception. The survey ended with demographic questions and questions about the participants own tattoos. Participants were recruited from Western Oregon University, and one extra credit point was offered for participat
Mentor(s): King, Brent

Holborn, Francesca

Anything is Pawsable: The Connection between Breed and People's Perception of Service Dogs

Compared to other animals, dogs appear to have the most excellent ability to understandhumans' nonverbal communication and social cues (Lucidi, Bernabo, Panunz, Villa, & Mattiolo, 2005). Service dogs provide a variety of different services and emotional support to their handlers. Additionally, specific breeds of service dogs must have distinct qualities, be particular sizes, and have specific temperaments to do their jobs adequately. Service dogs are defined in the ADA as any dog that is individually trained to do work or perform tasks for the benefit of an individual with a disability, including a physical, sensory, psychiatric, intellectual, or other mental disability.To the majority of the population, basic knowledge about service dogs is not well known, and few researchers have focused on service dogs regarding the knowledge individuals have and the specific types of service dogs used by people with disabilities. Without this basic knowledge, people are unsure of the proper ways to interact with service dogs. My goal is to survey a sample of the population to examine their prior knowledge about service dogs, and then ask them to rate three different breeds of dogs (Yorkshire Terrier, Golden Retriever, and Pitbull) on their ability to be a service dog. With the hope to bridge the gap between the increasing number of service dogs being used and the knowledge that comes along with interactions between individuals with and without

ACADEMIC EXCELLENCE SHOWCASE

service dogs.

Mentor(s): Brannan, Deborah

Gutierrez, Shawn

Assessing the Effectiveness of Stress Reduction Programs when Transitioning from Military Life to Civilian Life

This paper reviews articles discussing the transition and reintegration of military personnel into civilian life and the author's own research. While the three articles covered different aspects of reintegration, common themes arose in the research, the most common theme being the stress veterans felts during transition and the lack of resources available to lessen stress. In the author's study, designed to measure the level of stress veterans felt during the transition, he proposed that if veterans utilized stress reduction tools available through the Department of Veterans Affairs (VA) and or the Department of Defense (DoD), then they would report lower levels of stress during their transition. Using a basic survey with a Likert scale to measure level of stress, the author surveyed X Veterans at random, X who utilized VA/DoD stress reduction resources and X who did not. The mean level of stress score for participants who used the VA/DoD resources was M = X, whereas participants who did not, reported an average stress level of M = X. The evidence from these articles and the research conducted by the author shows that veterans experience high levels of stress during the transition to civilian life and those who used resources provided by the VA/DoD tend to report lower levels of stress than those who do not. This shows that the civilian world is lacking access to and knowledge of resources available to support veterans as they create a new future and find a new place in society.

Mentor(s): King, Brent

Gallegos, Kodie

Attention Delay in the Presence of Visual Distractors

Understanding the way attention is oriented has importance because it allows science to demonstrate visual models of human perception and the influence of cognitive organization and this is described, in some cases, through proximity to contrasting

objects, and is measured on how response time is increased or decreased in the presence of distractors (Kramer & Jacobson, 1991). The current study was used to evaluate the effects that visual distractors have on a person's reaction time using a Singleton task. Reaction time and accuracy were measured as the dependent variables.
Mentor(s): King, Brent

Juhasz, Andrea

Brain Games

The current study "Brain Games" looked closely at memory recall. It predicted that mint flavored candy will have an impact on a person's memory, and will help signals in their brain to recall the information at a later time. In this study, Men and Women were given fruit, or mint flavored candy to suck on while the researcher read aloud a list of words. After the list was read to them, the participants were given a blank piece of paper where they had two minutes to write down the words that they could remember.. Data will be analyzed using a 2 x 2 analysis of variance.
Mentor(s): Cloud, Jaime

Conley, Erika

Character Assessment in Romantic Relationships

The current study sought to integrate natural and sexual selection to investigate differences between men and women surrounding physical attractiveness in mate selection when comparing both short-term and long-term relationships. It was predicted that (1) participants would rate physical attractiveness more important in short-term relationships, (2) men would rate physical attractiveness more important than women, and (3) the importance men place on physical attractiveness would remain consistent regardless of length of relationship, while women would emphasize the importance of physical attractiveness more in short-term relationships. Participants were asked to rate 10 mating characteristics regarding desirability for a short-term or long-term mate. All mating characteristics were rated on a 7-point scale of desire, with 1 indicating extremely undesirable and 7 indicating extremely desirable. Data will be analyzed using a 2 x 2 Analysis of Variance. Implications of the obtained findings and future directions

will be discussed.
Mentor(s): Cloud, Jaime

Wilson, Benjamin

College Student's Perception of Tattoos

This study was designed to explore the current perception college students have in regards to tattoos. A survey was given that either had a photograph of a male with tattoos, or the same male without tattoos, or a female with tattoos or the same female without tattoos. Three questions were asked in response to the photograph. Following the photograph, an adapted version of the Martin Stigma Against Tattoos Survey was used in order to examine the current perception. The survey ended with demographic questions and questions about the participants own tattoos. Participants were recruited from Western Oregon University, and one extra credit point was offered for participating.
Mentor(s): King, Brent

Masters, Amy

College Students' Perception of Autism in both Children and Adults

The current study sought to determine the perception of college students on children and adults with autism using a scale of attributes. It was predicted that (1) participants would perceive the individual less positively when they were told the individual has autism – this is more true for adults than children with autism – and (2) participant would rate children more positively than adults whether they have autism or not. All participants were assigned to read one of four vignette conditions: a child with no autism, a child with autism, an adult with no autism, and an adult with autism. Then the students rated their reflection on eight semantic differential characteristics on a scale of negative versus positive traits. Data will be analyzed using a 2 x 2 Analysis of Variance. Implications of the obtained findings and future directions will be discussed.
Mentor(s): Cloud, Jaime

Soltz, Nathan

Comparing Friendship Love to Romantic Love in Men and Women

ACADEMIC EXCELLENCE SHOWCASE

This study sought to determine whether people felt feelings of love more strongly towards their best friend or their significant other. Research into the psychology of love is not new or unique, but there is a dearth of studies specifically regarding this question. It was hypothesized that both men and women will report feeling love more strongly towards their significant others than best friends, but that the difference between women's rankings wo be much closer than the difference between men's rankings. Men and women were given a survey which either asked how much they loved their best friend or their significant other. Data will be analyzed using a 2x2 Analysis of Variance. Implications of the obtained findings, potential future directions and philosophical considerations will be discussed.

Mentor(s): Cloud, Jaime

Nguyen, Jordan

Competitiveness and Gender in Video Games is a Factor that can Lead to Aggressive Behavior

The current study sought to determine whether or not (1) competitiveness and (2) gender of the player affects aggression when playing video games. The study predicts that men playing in a competitive environment will score higher in hostility. Participants were tasked to complete a single race in Mario Kart. Only half of the participants were instructed to beat a set time and that they would be rewarded a piece of candy. The other half were told to complete the race without external motivation. A post-game hostility questionnaire was given. Data will be analyzed using a 2 x 2 Analysis of Variance. Implications of findings and future directions will be discussed.

Mentor(s): Cloud, Jaime

Todd, Hannah

Confidence And Accuracy

The current study analyzes whether or not eyewitness confidence affects the accuracy rating of picking an offender from a line up when asked if they are sure of their decision. The first prediction is that individuals in the control group (do not get asked if they are sure) will be more accurate that the experimental group (who is asked if they are sure).

the second prediction is that the experimental group will repot less confidence than the control group. Both groups are presented with the same crime and the same possible offenders, but the experimental group is asked if they are sure of their decision whereas the control group is not. Data will be analyzed using a 2X2 analysis of variance. Implications of the obtained findings and future directions will be discussed.
Mentor(s): Cloud, Jaime

Gutzke, Diana

Do Engaged Friendships Increase or Decrease Anxiety

Do Engaged Friendships Increase or Decrease AnxietyAbstract

Diana Gutzke This study takes an investigative look into six different published research articles, the methods used and the results of the research that compare the factors of having an engaged friendship or social support network relationship between those who suffer from anxiety and the potential alleviation of anxiety through engaged friendships. Engaged, as is known to be defined by the amount of involvement one has with others, how invested one is in having a friendship or maintaining a social support network. This researcher adds to that definition by noting that to have an engaged friendship or social support network, is to have regular, trusting, positive, supportive, helpful and a strong connection with another.
Mentor(s): King, Brent

Fredricks, Morgan

Effect of Employment on Success in School

The study, Effect of Employment on Success in School investigates the impact employment can have on success in school. I hypothesize that the more hours worked, the higher the satisfaction in school. For this study, participants will complete a questionnaire asking about employment and school satisfaction. This study is onoing and data will be analyzed once collected, future directions and suggestions will be discussed.
Mentor(s): King, Brent

ACADEMIC EXCELLENCE SHOWCASE

Ackridge, Aminna

Effects of Aromatherapy on Induced Stress in Women and Men

This study investigated the influence of aromatherapy on induced stress in college students predicting that 1) inhaling lavender oil would reduce stress levels in response to a stressful video clip more than inhaling peppermint oil and 2) biological male and female participants would have similar stress level responses to each oil treatment. Participants either entered a room infused with lavender oil or peppermint oil and watched to watch a video clip from 9/11. They were then asked to fill out a survey to measure their stress response. The data will be analyzed using a 2 x 2 Analysis of Variance. Pending discussion of finding from research.

Mentor(s): Cloud, Jaime

Zieg, Andrew

Effects of Music On Mental Health

The purpose of this study is to explore how music therapy (listening to particular music genres) affects anxiety and mood in individuals who are 18-65 years old. Specifically, 40 randomly selected undergraduate students from Western Oregon University will participate in the study and will be randomly assigned to either the non-music therapy control group or an experimental music therapy condition (classical, rock, rap). Both groups will complete their required paperwork, which involves an informed consent, demographic form, a self-compiled mood survey, and a State Trait Anxiety Inventory (STAI) questionnaire. Results have not been found yet, but are expected to show how music can improve people's moods, stress levels, and overall well-being.

Mentor(s): King, Brent

Baurer, Kaitlyn

Effects of Role and Relationship on Forgiveness

The goal of the current study was to measure the participants' willingness to forgive by providing a scenario in which the participants were either the transgressor or the receiver in an intimate, familial, or stranger relationship. Participants were given one of the 6 vignettes that had the participant imagine themselves in a scenario where

ACADEMIC EXCELLENCE SHOWCASE

someone's pet died because it was ran over. In the vignette, the role that the participant played (receiver or transgressor) and the relationship the participant had to the other person in the scenario (intimate, familial, or stranger) was manipulated. The rest of the content remained the same across all vignettes. Participants were presented questionnaire that contained three statements regarding their willingness to forgive in that scenario. Interpersonal forgiveness and self- forgiveness were assessed together. The content was consistent throughout, with the exception of the transgressor's questionnaire which had two altered key words to indicate self-forgiveness. Participants ranked their responses on a 4-point Likert scale with anchors that ranked from 1 (Strongly Agree) to 4 (Strongly Disagree). A low score indicates a high level of the participant's willingness to forgive. Data will be analyzed using a 2 x 3 analysis of variance. Implications of the obtained findings and future directions will be discussed. Mentor(s): Cloud, Jaime

Porter, Sarah

Effects of Social Media on Self Esteem

Abstract   The effect that higher levels of social media usage hav on participants' self-esteem was measured by the use of surveys and the Rosenberg Self-Esteem Scale. The results have not yet been obtained, but it is expected that individuals with higher reports of daily and weekly social media usage will have slightly lower self-esteem ratings. The aim of the current study is to obtain information and implications regarding social media that could be useful for future research, considering the rise in media usage among the younger generations.
Mentor(s): King, Brent

Bailey, Paige

Facial Expression & Mood

The current study aimed to determine whether a positive facial expression will more strongly influence women's mood than men's mood. It was predicted that (1) females will have higher moods than men and (2) moods will be higher after seeing the happy expression compared to the neutral expression. Men were presented with a photograph

of a same-sex happy or neutral expression and women were presented with a photograph of a same-sex happy or neutral expression. Participants were then asked to rate 21 emotion words in regards to how they were feeling (1 = Very Slightly/Not At All; 5 = Extremely). Data will be analyzed using a 2 x 2 Analysis of Variance. Implications of the obtained findings and future directions will be discussed.
Mentor(s): Cloud, Jaime

Hennessy, Isabella

Fat is Not a Feeling

Problems with body image appear to be an important factor in the development of eating disorders, especially in cultures where body size is seen as a measure of self-worth (Haedt-Matt, Zalta, Forbush, & Keel, 2012). The present study hypothesized that low mood causes a negative shift in one's body image, especially for those who are predisposed to body dissatisfaction. This study was a 2x2 factorial pretest-post-test design experiment. The two independent variables were negative mood induction versus neutral mood induction and predisposed versus not-predisposed. The dependent variable being measured was body image. Participants were randomly assigned to either negative mood induction or neutral mood induction. After the experiment was finished, the negative mood induction group was divided into two groups by a median split based on their BSQ scores, and then were measured based on low concern for body image and high concern for body image (predisposed versus not-predisposed).
Mentor(s): King, Brent

O'Connor, Kailey

Gender Assumptions in Today's Culture

Mentor(s): King, Brent

Scott, Rachelle

Generational Status on Perceived Stress and Sleep Quality

There is a vast body of research documenting the relationship between perceived stress and sleep quality, making the topic a focal point in intervention with student mental

health on campuses nationwide. Another variable, generational status, might have a significant influence on perceived stress and sleep quality among students that could potentially warrant more attention on first generation students. First generation students have been shown in previous research to score higher on stress, trauma, and depression scales. One possible explanation is the lack of financial resources, family support, and knowledge of how to navigate the system of higher education. This study will compare stress and sleep scores of first generation and non-first generation students on campus at WOU using the Pittsburgh Sleep Quality Index and the 10-item Perceived Stress Scale. Data will be analyzed using an independent T-test and two one-direction ANOVA tests.

Mentor(s): King, Brent

Hartnett, Rachel

Gum and Memory

Mentor(s): King, Brent

Klus, Taylor

How Does Gender Affect Criminal Perception?

There is a national perspective pushed on our society that women may be more sympathetic than men, and this perception holds true for those in a legal setting. Many lay people believe that female jurors will be more sympathetic to their defendant compared to men. and may therefore have bias when selecting jurors . This study will compare how male and female participants guess the severity of crimes people committed. It will be up to the subjects to determine how bad of a criminal people are exclusively based on looks. The dependent variable will be the overall score of the test. The results will compare how men and women rate both male and female defendants. The research is still being co

Mentor(s): King, Brent

Askew, Bryce

Images and words effect on False Memory

Abstract This study is aimed to investigate the effect images and descriptions have on memory. An image used with a description of said image . A short questionnaire followed. This study is to test wether mildly misleading descriptions can cause memory to become false when recalling original image   X amount of Students age 18 to 75 from Western Oregon University. Research is ongoing
Mentor(s): King, Brent

wolven, monica;,

Impact Odor Has on Emotions and Memories

My study will be showing how odor (olfactory system) can trigger past emotional memories and how it can change one's mood. Participants were given one of 4 smells at random to smell; they will give feed back in the following manner. Fill out a pre-mood, memories trigger if any, post mood questionnaire. Data coll is still ongoing at this time.
Mentor(s): King, Brent

Llamas, Edgar

Infidelity and Mood

Previous research on romantic jealousy showed that men and women's jealousy level differed whether it was sexual or emotional infidelity. The purpose of the study was to determine if this effect would still be seen. We predicted that male participants would be more jealous if their partner was involved in a sexual affair rather than an emotional affair. For female participants, we predicted that they would be more jealous if their partners were involved in an emotional affair rather than a sexual affair. Participants (N = 0) were going to be randomly assigned to read a scenario in which they will have to image themselves in an emotional or sexual cheating scenario, unfortunately we were not able to gather any participants or data. Results were undetectable, future research will have to be done to determine if our predictions were correct.
Mentor(s): Cloud, Jaime

Gebbie, Nicole

Kuleshov Who?

The Kuleshov Effect, based on ideals of Lev Kuleshov, an early filmmaker, is the effect on facial expressions caused by surrounding objects or situations. Essentially, we perceive how others are feeling based on their surroundings, as seen by Kuleshov's experiments with blank facial expressions next to specific objects. In this experiment, the goal is to see whether or not this has the same effect after watching specific videos, as well as based on the mood of the person during the time of the experiment.
Mentor(s): King, Brent

Coates, Abigail
Listening vs. Reading and it's Effect on Short-Term Memory with Men and Women
The current study aimed to investigate if the way information is presented (i.e., reading vs. listening) affects short-term memory in women and men. I predicted that the (1) participants in the reading silently condition would score higher on the comprehensive test than participants in the listening condition, (2) women would score higher on the comprehensive test then men, and (3) there would be an interaction between the manner in which material was comprehended and gender. Men and women read or listened to a short-passage then took a comprehensive test. Data will be analyzed using a 2 x 2 Analysis of Variance Implications of the obtained findings and future directions and suggestions will be discussed.
Mentor(s): Cloud, Jaime

Zwicker, Kelsey
Mood and Personality
An increased amount of attention by clinicians, businesses, academics, and therapists is being paid to the various effects that color and light can have on students. Higher energy lights are increasingly used to treat depression and sleep disorders, and color as a factor of interior design can play a large role in shaping the character of a workspace. The participant of this study was 18 or older and self reported that they are not blind, white, and female. The participant was placed in one of four lighting conditions, variable by their color and color temperature, and then instructed to take a dummy test and a PANAS mood criteria. The lighting conditions (Color and Color Temperature) and the

results from the mood test were compared using two-way ANOVA. Given the small sample size (n = 1), results were not able to be computed with much efficacy, and significance was not achieved. Future experiments should explore a more representative population and attempt to achieve a larger sample size in order to better investigate this effect.
Mentor(s): Cloud, Jaime

Harvey, Nicholas
Music & Memory
The current study sought to determine if music has an effect on memory. The study predicted that (1) Participants who listen to the instrumental music will remember more words than participants who listen to music with lyrics, (2) Women will overall have better memory than men, and (3) While both women and men's memory will be negatively impacted by the presence of vocals, women's memory will be more negatively impacted than men's. Men and women were asked to pick between two folded pieces of paper, one labeled 1 and the other labeled 2. This number determined if the participant would listen to lyrical (1) or instrumental (2) music for 90 seconds while studying a list of 15 words. After 90 seconds, participants then had 60 seconds to write down the words they remembered. Data will be analyzed using a 2 X 2 Analysis of Variance. Implications of the obtained findings and future directions will be discussed.
Mentor(s): Cloud, Jaime

Garcia Coria, David
Music Differences on Recall Memory
Mentor(s): King, Brent

Idler, Nash
Music's Effect On Memory: Lyrical Vs. Non-Lyrical Music
Previous research on music shows that it is possible that music may have an affect on people's memory. The purpose of this study is to see what type of music would be best when studying, music with lyrics or music without. I predict that students that listen to

music without lyrics will perform better in a memory test than those that listen to music with lyrics. To conduct this experiment, participants will be randomly assigned into either a group that listens to no music, a group that listens to lyrical music, or a group that listens to music without lyrics. While listening to the music they will be asked to try and remember as many words as possible from a word bank that was given to them. After 2 minutes of listening to the song and studying the words, the word bank will be taken from them and they will be asked to write down as many words as they can.Keywords: Music, Memory

Mentor(s): King, Brent

Grimsrud, Maxwell

Noticing Gender: Effects of Senders Gender on Survey Response Rates

This project examines the potential effect of sender gender on emailed survey's drop off rates in college undergraduates. Previous research has indicated that the gender of the person distributing the survey can effect drop off rates, specifically a female distributor showed an increase in a male cohort. This study seeks to replicate those findings in a different environment where a majority of behavioral science research occurs. Currently, data collection is ongoing.

Mentor(s): King, Brent

Doster, Jordan

Passion and Music's Influence on Memory

This study tested if listening to preferred music enhances participant's memory and if being passionate about music is a significant variable that influences memory recall. Studies in the past have shown that familiar or preferred music releases dopamine to the brain generating a synaptic release. participants who are passionate about music and who listened to preferred music would have higher recall scores. I had participants answer what their level of passion was for music (passionate or not passionate). Next, the treatment group participants were asked to pick a song they liked from YouTube to listen too. In the controlled group, "Never Gonna Give You Up" by Rick Astley was played. Participants were given 45 seconds to memorize a sheet of paper with 15 words

once the music started. After the 45 seconds were done, the participants wrote down as many words as they could remember under 1 minute. The research concluded that there was not a significant difference between passion level, the selection of music, and word recall test scores. I would change the measure of passionate for music by implementing a Likert scale of 1-10 which would capture the level instead of a yes or no response. The study would benefit through further research that more participates join for future studies to find if results are significant.

Mentor(s): Cloud, Jaime

Mehciz, Madeline

Perceived Body Confidence Based on Active Vs Non-Active Individuals

Purpose: examine whether people will perceive active individuals to have a higher body satisfaction than inactive individuals, and the prediction is that the effect will be stronger in females than in males.Methods: Each participant saw an individual that was the same sex as themselves, and the picture was the same individual either in exercise clothes, or lounging on the couch (see appendix). They were asked to answer a set of questions based on the photo they saw. The question that I was looking at was "How likely do you think this individual is to rate themselves as being confident". This question was scored with either very confident, confident, less confident, and not confident at all. The results of the scores were tallied, high scores on the image with the active individual means they are likely to have high body confidence, and low means they are neutral or low body confidence.Conclusion: Due to a lack of participants, the level of effect is low and we had to fail to reject the null, and there was no significant differences between pictures and between genders since no males participated in the study.

Mentor(s): King, Brent

Villagomez, Helen

Perceptions of Attractiveness and Trust

The purpose of the study was to examine attractiveness and its relationship with trust than individuals who are not attractive but are associated with being trustworthy. Participants were recruited via SONA. Participants come in and sign the informed

consent, fill the demographics sheet, and rate a photo on a scale of 1-4. Data gathering is still ongoing, but it will be done and ready to go by May 30th.

Mentor(s): King, Brent

Haas, Maddie

Perceptions of Gender and Infidelity

Infidelity or cheating in intimate partnerships, however much frowned upon, appears regularly in our lives. However, as it is not a popular topic of discussion, many questions are left to be answered regarding the motivations and cognitive processes surrounding why people choose to participate in extradyadic behaviors or "cheat". The featured study approaches the topic of infidelity and aims to analyze possible relationships between gender and likelihood to be unfaithful in a relationship. The results of the current study will be analyzed against data collected from a previous study of similar design of the same researcher. Data was collected via an online survey and distributed via SONA. Da

Mentor(s): King, Brent

Johnson, Jesse

Perceptions of Piercings based on Skin Color

The current study is looking to use people's natural biases to predict that (1) men with piercings will be perceived as less approachable than men without piercings (2) and men with light skin will be perceived as more approachable than men with dark skin. Participants will be presented with a photograph of a man either with a piercing or without and either with light skin or dark skin. Participants will be given a scenario in addition to the photo to put themselves in. Each participant will give their approachableness rating on a scale from one to seven. Data will be analyzed using a 2x2 Analysis of Variance. Implications of the obtained findings and future directions will be discussed.

Mentor(s): Cloud, Jaime

Haskett, Morgan

Perceptions of Promiscuity

The current study sought to examine whether the sexual double standard still prevalent in today's society by measuring participants' perceptions of promiscuity. It was predicted that (1) the higher number of sexual partners the target person had, the higher level of promiscuity the participant would perceive of the target individual and (2) male participants will endorse the sexual double standard more than women by perceiving the target female as being more promiscuous than the target man, when both target genders had an equal number of sexual partners. All participants were presented with a vignette in which there was a target individual being depicted as either male or female, with either a high or low number of sexual partners. The participant was then asked to answer a subsequent questionnaire that measured their perception of promiscuity of the target person. Data will be analyzed using a 2 X 2 X 2 Analysis of Variance. Implications of the obtained findings and future directions will be discussed.

Mentor(s): Cloud, Jaime

St George, Jill

Perceptions of Tattoos

The current study pursued to assess perceptions of individuals with or without tattoos and if the gender of the individual with or without tattoos had an influence of the perceptions of others. This study predicted 1) men will be more likely approached than women either with or without tattoos, 2) women yielding tattoos will be more approachable than women without tattoos, and 3) that men will be more approachable without tattoos than men with tattoos. Participants were presented with one of four photographs (male with or without tattoos and female with or without tattoos) in correspondence with their random assigned group and asked to rate how likely they would approach the photographed individual. Data will be analyzed using a 2 x 2 Analysis of Variance. Implications of the obtained findings and future directions will be discussed.

Mentor(s): Cloud, Jaime

Harris, Alyssa

Personal Expression and Opinions

The current study sought to examine the relationship between age and perceptions of individuals to predict that (1) nontraditional college-age students will perceive individuals with facial piercings as more threatening than traditional college-age students would and (2) participants will rate an individual without facial piercings as more non-threatening than they would rate the photo of the individual with facial piercings. The participants were presented with either a photo of a woman with or without facial piercings and then asked to rate how much they agree or disagree with three statements regarding whether they felt the woman was social, responsible or threatening. Data will be analyzed using a 2 x 2 Analysis of Variance. Implications of the obtained findings and future directions will be discussed.

Mentor(s): Cloud, Jaime

Walston, Mackenzie

Racial Biases in the Criminal Justice System

America has the highest incarceration rate of the world. Over 2 million people are in prison in the United States, and 70% of those inmates belong to a minority ethnic group. This issue has caused many researchers to ask the questions, "Does the ethnicity of a defendant affect whether or not they are more likely to get parole?" and "Does race impact levels of comfort on having a convict live near your home?". This study sought answers to these questions by having participants read one of two case stories with the race of the defendant either being Caucasian or African American, and then answering two questions at the end. Possible discrepancies between the two groups will be analyzed. Data collection for the study is currently ongoing, but will be finished by the time of the presentation.

Mentor(s): King, Brent

Elliott, Malia

Seasonal Affective Disorder differences in Gender

The purpose of this study is to investigate the differences between genders in regard to Season Affective Disorder (SAD). I will also be looking at the personalities related in

those who suffer from SAD. To obtain this information I had participants take three questionnaires online. The first questionnaire is the Inventory of Seasonal Variations (ISV). This is a highly dimensional measure of seasonal variation in mood and behavior. The second is a basic demographics questionnaire in order to obtain gender and age. Lastly, I used the Eysenck Personality Questionnaire Revised-short scale Form (EPQR-S). This is used to study the personality related to the people with SAD. These are all self-reported questionnaires. At this time, I am still gathering information for the results. Mentor(s): King, Brent

Lopez Lopez, Maira

Sex Differences and the Impact of Art on Anxiety Levels of College Students

The current study examined the effectiveness of art-making at reducing anxiety among college students to predict that (1) participants will report lower anxiety after completing a drawing activity than a word search puzzle activity and (2) women will report lower anxiety than men. Finally, an interaction was predicted, such that while the drawing activity will decrease both male and female anxiety, it will decrease women's anxiety more strongly than men's. Students were randomly assigned to either a drawing activity or a word search puzzle activity. A State Trait Anxiety Inventory (STAI) was used to measure changes in anxiety levels of participants in the drawing and word search puzzle group. Data will be analyzed using a 2 X 2 Analysis of Variance. Implications of the obtained findings will be discussed.
Mentor(s): Cloud, Jaime

Samson, Rishel

Sex Differences in Memory Recall in Response to the Presence of Background Music

The current study examined if background music being present vs. absent would impact memory recall differently for men and women. It was predicted that (1) for all participants, memory performance will be weakened with background music compared to silence, (2) in the presence of music, men's memory recall performance will be less impacted, whereas women's memory recall performance will significantly decrease

when background music is present and (3) women's memory recall performance will be better than men's regardless of music condition. Men and women were placed in either the control group (silence) or the experimental group (background music present). The participant was then asked to study a provided list that included 25 one-syllable words. Subsequently, the participant was asked to write down as many words as they could recall on a sheet of paper. The music was the same for all participants in the experimental group. Data will be analyzed using a 2 x 2 Analysis of Variance. Implications of the obtained findings and future directions will be discussed.
Mentor(s): Cloud, Jaime

Stacks, Ashley

Sex Differences in Perceptions of Women in the Workplace

The current study sought to investigate the level of implicit biases toward women in the workplace. It was hypothesized that exposure to a news article featuring a female subject will result in lower levels of implicit biases in all participants, and that men will show higher levels of implicit biases across all conditions. Participants were presented with one of two identical mock news articles featuring either a man or woman as the subject. After reading, participants were prompted to complete the Women and Career Harvard Implicit Association Test. Data will be analyzed using a 2 x 2 Analysis of Variance. Implications of the obtained findings and future directions will be discussed.
Mentor(s): Cloud, Jaime

Lau Hee, Courtney

Sex Differences in Response to Coincidental Experiences and Paranormal Belief

Paranormal belief has had a large impact on many people's everyday lives (Hadlaczky & Westerlund, 2011). Studies have shown believing in the paranormal can be positively correlated with coincidental experiences (Blackmore & Troscianko, 1985; Bressan, 2002; Brugger & Graves, 1997; Hadlaczky & Westerlund, 2011). The primary goal for this study is to determine whether paranormal belief increases in the event of a coincidence and if this increase differs between male and female participants. For this study, the experimental group will be given a coincidental scenario and the control

group will given a non-coincidental scenario. Prior to reading their scenario, participants will take the first half of a paranormal belief questionnaire to measure their pre-scenario paranormal belief. Directly after participants read their scenario, they will be instructed to take the second half of the paranormal belief questionnaire to measure their post-scenario paranormal belief. Data will be analyzed using a 2 x 2 Analysis of Variance. Implications of the obtained findings and future directions will be discussed.
Mentor(s): Cloud, Jaime

Ormesher, Lindsey
Sex Differences in Response to Jealousy in a Romantic Relationship
Evolutionary psychologists have sought to explore if jealousy within a romantic relationship is an adaptation in response to an external threat. The purpose of the present study was to investigate the difference between men's and women's responses to a perceived sexual or emotional affair in a committed romantic relationship. Prediction 1: women will have higher distress ratings than men after imagining their partner having an affair. Prediction 2: participants will provide equal distress ratings for sexual and emotional infidelity. It was hypothesized that men's and women's jealousy ratings would depend on affair type, such that women would report greater distress over emotional infidelity than sexual infidelity, whereas the opposite would be true for men. Participants were asked to imagine being in a committed romantic relationship, and then were randomly assigned to read a text message that indicated their partner was having either a sexual affair or an emotional affair. After reading one of the two messages, participants were asked to rate on a 7-point Likert scale how distressed they felt while reading the text message. Data will be analyzed using a 2 x 2 Analysis of Variance. Implications of the obtained findings and future directions will be discussed.
Mentor(s): Cloud, Jaime

Wolf, Maya
Sexual Assault Myths on College Campuses
Mentor(s): King, Brent

Garcia, Cesar

Sleep Patterns on Academic Achievement

With modern times rapidly changing, the opportunity for new distractions to arise are becoming more and more prevalent, and this is especially problematic when these endless distractions impact the amount, and quality, of sleep that we get. This can definitely become a concern when the reduced amount of sleep can affect adolescents, especially when they are in a critical time of their lives where this can affect their learning and academics. College students were used as the main test subjects, and they were asked to take surveys to help us get a better understanding of their sleep habits. We were also interested at looking at how their sleep patterns affected their academics, so we also had them take a seperate survey relating to their academics alone. The results are still a work in progress.

Mentor(s): King, Brent

Scoggins, Haley

Social and Group Influence on Opinions of Male/Female College Students

Mentor(s): King, Brent

Stevens, Shawn

Student Service Member and Veteran Perception Within the College Community

The purpose of this study was to examine the perception of student service member and military veterans (SSM/V) in college by other college students, with the goal of examining any signs of positive or negative bias toward the SSM/V group. Several randomly selected undergraduate university students participated in the study and were assigned to either the control group (non-SSM/V) or the experimental group (SSM/V). Participants each completed anonymous paper surveys. Many areas of bias were examined in the survey to include success, fitting in, capability, comfortability, fairness, sociability, suggestibility, and relatability.

Mentor(s): King, Brent

Grimes, Alyssa

The Effect of an Instructor's Encouragement on Test Scores

The current study desired to test the effect that encouragement has on test performance. It was predicted that (1) those who receive encouragement before attempting a word search will perform better than those who do not receive encouragement and (2) women will find more words, when encouraged, than men. All participants were given instructions to complete the word search as best they could in 4 minutes. One group received words of encouragement before starting their word search. They were told by the instructor "Don't worry, you've got this. It's an easy test." Participants in the second group were given the same instructions, however, they were not given the words of encouragement prior to the test. Data will be analyzed using a 2 x 2 Analysis of Variance.

Mentor(s): Cloud, Jaime

Hoffmann, Madison

The Effect of Genres of Music on Stress Levels Among Men and Women

The current study aimed to examine whether contrasting kinds of music have different impacts on levels of stress between men and women. It was predicted that listening to relaxing music will reduce stress levels in both sexes and particularly men will have lower levels of stress listening to both relaxing and non-relaxing music. In this study, relaxing music was defined as meditation music and non-relaxing music as heavy metal music. Men and women were given a self-esteem questionnaire to fill out while listening to either relaxing or non-relaxing music. Participants were then given a post-test survey evaluating stress and relaxation levels. Data will be analyzed using a 2 x 3 analysis of variance. Implications of the obtained findings and future directions will be discussed.

Mentor(s): Cloud, Jaime

Johnston, Ashley

The Effect of Tattoos and Participant Gender on Perceptions of Personality

This study looked at previous findings related to the effect that tattoos have on job outcomes, perceptions of personality, and peer interactions. From these findings the study predicted that 1) participants shown an image of a man with tattoos on his face,

neck, and arms would rate him as less friendly than participants would rate the same man without tattoos and 2) female or gender queer participants would rate the man with tattoos as less friendly than male participants would rate the same man. Participants were asked for their gender identity, then given a survey. Half of the participants were given a survey with an image of a man with tattoos on all showing parts of his body, and half were given a picture of the same man but with tattoos photo shopped away. All participants were then asked to rate the man on how friendly he appeared. Data will be analyzed using a 2 x 2 Analysis of Variance. Implications of the obtained findings and future directions will be discussed.

Mentor(s): Cloud, Jaime

Schlappie, ChyAnne

The Effect of Tattoos on Perception

Previous research on perceived attractiveness shows a sex-differentiated standard response to the presence of body modifications such as tattoos. The purpose of the current study was to examine if the presence of tattoos affected perceived attractiveness in men and women differently. It was predicted that tattoos will more negatively affect females' perceived attractiveness of a female model than males' perceived attractiveness of a female model. Participants (N = 0) were to be randomly assigned to view one of two images of a female model, with or without tattoos, and rate her attractiveness on a 5-point Likert-scale. Unfortunately, results were inconclusive due to the lack of participants via SONA.

Mentor(s): Cloud, Jaime

Manriquez, Adrian

The Effects of Background Music and Chewing Gum on Memory Recall

This is a study that is examining study habits within college students. Specifically, we are looking at what affects chewing gum and background music has on memory recall among undergraduates. Participants were randomized into one of four trials, gum and background music, solely chewing gum, solely background music, or neither of the two conditions to serve as a control group. All participants were given a list of 15 abstract

words to memorize and after reading the list for two minutes, participants were then asked to solve math probelms for a minute. Then, participants were to recall as many words as they possibly could on a sepreate sheet of paper. This study will be completed May 16th.

Mentor(s): King, Brent

O'Gorman, Shaelyn

The Effects of Essential Oils (Peppermint vs Lavender) on Word Recall in Men and Women

The current study investigated the difference between lavender and peppermint essential oils on word recall in men and women to test the predictions that (1) peppermint would produce higher word recall scores than lavender, (2) women would recall more words than men, and (3) there would be an interaction between odor diffused and gender. The odor diffused was alternated across days. Prior to the participant entering the study, peppermint essential oil or lavender essential oil was diffused in water. Participants had one minute to look over a list of 15 one-syllable words and memorize as many words as possible. After one minute, they were asked to verbally recall as many words as they could. Data will be analyzed using a 2 x 2 Analysis of Variance. Suggestions about the findings and any possible future research will be discussed

Mentor(s): Cloud, Jaime

Greer, Victoria

The Effects of Note Taking Methods on Test Performance

The present study sought to determine whether different note-taking mediums affected test performance. It was predicted that (1) longhand notes would produce higher test scores than typed notes and (2) that there would be no difference in performance between men and women. Male and female participants were randomly placed into either a longhand or typed note condition. Both note-taking conditions were shown an identical video and asked to take notes on the video's subject in their respective medium. Participants were supplied with either a laptop or a pen and paper to complete

the task. After completion of their notes, participants returned all materials to the experimenter and were tested on the subject. A 2 x 2 Analysis of Variance will be used to analyze data. Results of the study will be discussed with reference to potential areas for future research.

Mentor(s): Cloud, Jaime

Firth, Camille
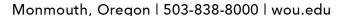
The Effects of Sugar on Memory

The Effects of Sugar on Memory looks at the a memory task where half the participants drink a sugar rich beverage before the test, and the other half do not. The purpose of this study is to see if sugar consumption helps to increase memory. The current study is ongoing.

Mentor(s): Firth, Camille

Pickrell, Shaylie

The Perception of Polyamorous Relationships Based upon Personal Relationship Status

The purpose of this study was to better understand the perception surrounding polyamorous relationships, and to better understand how opinions may vary depending on if the person providing the opinion is in a relationship or not, and what type of relationship they identify themselves to be in if applicable. It was predicted that those who identify themselves to be in committed, monogamous relationships would rate the level of overall commitment for a polyamorous relationship much lower than a person who was in a non-exclusive relationship or someone who is not in a relationship would rate it. University students were given a demographics form and then were randomly assigned to two different condition; one condition included a monogamous vignette (control) and one included a polyamorous vignette (experimental). The participants were instructed to read the vignettes and then answer two questions relating to their perception of commitment and then their own understanding of polyamorous relationships. There was significant increase in the level of perceived commitment for participants in a relationship and in the control group than those who were single and in

the experimental group.
Mentor(s): Cloud, Jaime

Palanuk Mercier, Melissa

The Relationship Between Personality and Memory

The Relationship Between Personality and Memory Study looks to explore the possible relationship between personality and memory. Previous research has shown that introverts perform better on memory tests when there is no background noise present. Conversely, extroverts perform better when there is background noise. The present study explores this possible relation by having participants fill out a survey to determine if the individual is introverted and extroverted. Then the participants take part in two memory trials, one with noise present and one without noise. The study is currently ongoing and the results of the study will be available at later date.
Mentor(s): King, Brent

Macias-Torres, Katherine

Undergraduate Greeks, Perceived Intelligence, and Sex

The current study sought to examine undergraduates not affiliated with a social Greek lettered organization. Specifically, how non-Greek lettered undergraduates perceive the intelligence of undergraduate Greek letter members, while also examining if gender impacts this perception. It was predicted that non-Greek undergraduate students would be more likely to rate a student wearing Greek letter paraphernalia as having lower academic achievement than a student without Greek letter paraphernalia. It was also predicted that males in a fraternity would have lower academic achievement ratings than females in a sorority. Data will be analyzed using a 2 x 2 Analysis of Variance. Implications of the obtained findings and future directions will be discussed.
Mentor(s): Cloud, Jaime

Harrel, Whitley

Video Game Music and Task Performance

Examining the experimental question of how video game music affects performance on

a mentally challenging task. The two groups consist of video game players and non video game players. They are randomly selected to listen to either the boss battle music or town music while playing the 2-back test.

Mentor(s): King, Brent

Hancock, Lee

Why Eat That: Examination of Taste Expectations and Perceptions

This study examines whether there is a relationship between how a food is described and how likely someone is to try it based on the description, as well as how a person's taste perceptions are affected as well. The conditions being examined include a positive description of some less common cheese samples, as well as a negative description of the same samples. A control conditions was given no description. Each participant was given a before survey, asking about their eating habits, specifically when it came to new foods, and an after survey, that gets at the questions of their willingness to try something similar again, and how the sample tasted to them.

Mentor(s): King, Brent

Session: 1. Behavioral Sciences Symposium

Leinenweber, Margaret

"It's always family first for us": An Intergenerational View on Grandparent Death

"It's always family first for us": An Intergenerational View on Grandparent Death

Abstract   With increased longevity, grandparent relationships provide opportunities for grandchildren to stay connected to their grandparents across childhood and into early adulthood.Consequently, the death of a grandparent often reverberates across a family system. The quality of family relationships, family member roles, family identity, and coping strategies influence how grandparent death is experienced. This dyadic, qualitative study explores grandparent death by examining the experiences of young adult college students and their mothers (N = 16) who reported the death of a grandparent (parent) within four years prior to data collection. Using a life course perspective lens, our research focused on meaning, attitudes, and family interactions

among dyads after the death. Highlighting the developmental positions of the dyad allowed us to gain a deeper understanding of the parent child relationship and how grief was experienced within the relationship. Furthermore, dyads described the personal transformations, rituals, and curation of memories that occurred individually and within the family. This study has implications for individual and family approaches to grief when a valued family member dies.

Mentor(s): Manoogian, Margaret

Leseberg, Jacoby

"Old Coot" or "Wise Owl?": Exploring Relationships Between Young Adult Grandchildren and Their Grandfathers

The grandparent role is a dynamic and often ambivalent relationship requiring simultaneous navigation of "being there" and "not interfering" in the lives of grandchildren (Mason, May, & Clarke, 2007). These relationships change as grandchildren mature, and can result in new grandparent-grandchild connections based on communication, intimacy, and mutual respect (Sheehan & Petrovic, 2008). Utilizing a dyadic convenience sample of grandfathers and young-adult grandchildren (N = 32), this study investigates the impact that grandfathers have on their young-adult grandchildren. Utilizing a life course perspective, we asked: a) How do grandfathers invest in the futures of their young-adult grandchildren? b) How do young-adult grandchildren recognize and receive their grandfather's investments in their futures? Preliminary results suggest that grandfathers emphasized their grandparenting role and dyads acknowledged grandfathers as moral and spiritual influencers. When asked to recall meaningful memories, both young-adult grandchildren and grandfathers were more likely to remember instances of shared hobbies, interests, and personal connections; however, grandfathers and grandchildren did not always agree on the transmissions intended and received. Findings have implications for recognizing how grandfathers wish to influence the lives of their grandchildren.

Mentor(s): Manoogian, Margaret

Martinez, Roman

Does a Performance Task Impact Interest in Feedback

Does a Performance Task Impact Interest in Feedback?AbstractThis study investigated whether individuals who were assigned a performance-instructed condition would score higher on interest to receive feedback on how well they did compared to others and that individuals who were assigned a neutral-instructed condition would score lower on interest to receive feedback on how well they did compared to others. 26 participants ranged between the ages of 18 to 42 (M = 21.96, SD = 5.02); 17 female, 9 male, 17 White, 8 Latino, 1 Native Hawaiian/Pacific Islander. The participants in this study were recruited through the behavioral sciences division of Western Oregon University. 50% of the participants in the sample were psychology majors. Each of the participants was randomly assigned to either one of two groups and was given the task of building a Lego toy on a timed sequence of 3 minutes. Students then rated their interest to hear how well they did compared to others who performed the same task. The results demonstrated that there was no significant difference between individuals assigned a performance-instructed task and individuals assigned a neutral-instructed task for interest in feedback on how well they did compared to others. Performance Condition (M = 8.00, SD = 1.82). Neutral Condition (M = 7.9, SD = 2.13) Scores on the Likert-type scale ranged from 1-10. $t(24) = .127$, $p > .05$, $r2 = .005$.
Mentor(s): McMahan, Ethan

Diaz, Sharik;Howells, Mary;Fitch, Christy;Depascal, Stephanie
Life Review: Helping Older Adults Engage in Self-Discovery and Legacy-Making
Life review is the active process in which older adults reflect on their past experiences, present circumstances, and anticipated futures. During this ten-week project, we identified older adults to interview, met weekly with them to discuss life topics such as family, death, and spirituality and at the end, produced a written legacy that could be passed down to future generations. Our presentation will provide an overview of the life review process, outcomes for older adults and the student interviewers, as well as examples of the final life reviews. We will also highlight the joy, humor, and bonding that marked this process.
Mentor(s): Manoogian, Margaret

Kerwood, Renata;Rowley, Sam;Kondash, mandie;Wehr, Hannah

Opportunities for Partnership Between a Senior Center and University to Create a More Age-Friendly Community

Older adults' attitudes and decisions toward using a college campus and a senior center as a third placeOlder adults' attitudes and decisions toward using a college campus and a senior center as a third placeThe purpose of the current study is to understand the attitudes and decisions related to using a third place, where people can gather informally for psychological support through a shared sense of grounding, ease, comfort, friendliness, and mutual concern (Oldenburg, 1999). Through a case study design, we used mixed methods to collect data from senior center members to gain an understanding of how older adults use a senior center and a college campus as examples of third places. Data were analyzed utilizing focused coding of open-ended responses and descriptive statistics from the quantitative data. Findings revealed implications related to lack of awareness, communication, and perceived barriers, contributing to overall goals of supporting older adults aging in place through creating opportunities for them to feel engaged and empowered in their communities.   The purpose of the current study is to understand the attitudes and decisions related to using a third place, where people can gather informally for psychological support through a shared sense of grounding, ease, comfort, friendliness, and mutual concern (Oldenburg, 1999). Through a case study design, we used mixed methods to collect data from senior center members to gain an understanding of how older adults use a senior center and a college campus as examples of third places. Data were analyzed utilizing focused coding of open-ended responses and descriptive statistics from the quantitative data. Findings revealed implications related to lack of awareness, communication, and perceived barriers, contributing to overall goals of supporting older adults aging in place through creating opportunities for them to feel engaged and empowered in their communities.

Mentor(s): Cannon, Melissa

Richert, Ashley

The Prospective Ongoing Investigations on Nontraditional Students

An increasing number of older adults and students balancing multiple roles are returning to higher education. These students are not only balancing their school work, but also their work lives and family lives (Gilardi & Guglielmetti, 2011). Our goal in the present study is to investigate the stressors and support systems that are unique to non-traditional students as they are balancing these multiple roles. Some possible moderators and mediators we would like to investigate include health-related behaviors such as social support, and access to health care. Additionally, we are going to expand the general definition of "non-traditional student" by considering the roles that students hold rather than an age minimum or child status. Specifically, we will define them as non-traditional if a person goes to school and they work and they are married and/or have children living with them that they care for, and/or they are the primary caregiver for a family member.Using data from our pilot study, we have a greater sense of what constitutes a non-traditional student and what their needs, supports, and stressors are; therefore, we can more accurately assess their unique academic situation. In this talk we will present data from our national study on support, work-family-school conflict, and student hunger/security.

Mentor(s): Brannan, Deborah

Haskett, Morgan;Stone, Arianna

Waist to Hip Ratio in The Pop-Out Effect

The current study sought to examine perceptual and attentional biases related to the detection of discrepant stimuli in a visual display. Participants were presented with an image matrix, containing pictures of women differing in waist-to-hip ratio (WHR). They were instructed to identify whether one WHR differed from the other WHRs in the array. It was predicted that participants would more quickly detect a .70 WHR in an array of .90 WHRs than the reverse. In this presentation, we will describe our proposed research design and anticipated results.

Mentor(s): Cloud, Jaime

Session: 1. Biological Sciences

Yoon, Liz Yijung

A Review of How Chemical Deicers Impact Aquatic and Terrestrial Species

Chemical deicers often containing salts are applied on roads for winter maintenance and safety. These deicing salts run off from the roads and contaminate roadside terrestrial and aquatic habitats, with the potential to negatively impact organisms. Our knowledge of these effects has been mostly limited to a few individual species, however and a comprehensive review of possible effects of a variety of deicers on a wide range of species is lacking. We reviewed 22 papers that focused on the effects of these salts on aquatic and terrestrial plants and animals. With NaCl being the most commonly used salt, different types of salts were compared to NaCl to examine their relative effects. There were five different dependent variables that were examined: median lethal dose (LC50); growth, germination; population density; and biological oxygen demand (BOD) and we looked at how different salts affect these variables. Compared to NaCl, other salt types were more harmful, meaning they lowered species' LC50 levels and affected their growth, germination, population density, and BOD at lower concentration levels. Overall, we found that amphibians were the least tolerant to salinity compared to some invertebrates, and eggs and larvae were the most vulnerable life stage compared to adults. Our knowledge is very limited however, and there are significant gaps that need to be filled with further studies. Future studies should focus on a wider range of species other than amphibians and insects and make more comparisons of different salt types to NaCl to find out which salt at what concentration will be the least harmful to certain species.

Mentor(s): Hopkins, Gareth

Knapp, Grace;Thomas, Sydney

Effects of Developmental Density on Drosophila Offspring

Fruit flies, Drosophila melanogaster, reproduce rapidly and prolifically, making them a model organism for studying heredity and development. Previous studies have shown that flies raised in isolation have altered visual and olfactory function, and we wanted to test whether this has an effect on offspring of flies raised in varying densities. We

hypothesize that the flies raised in isolation will have lower fecundity than those raised in higher densities and in return create offspring of lower weight. To test this, we raised Drosophila larvae in three different densities: high density (40 larvae/mL food), medium density (5 larvae/mL food), and in isolation. After these flies matured, we set up nine pairwise crosses between flies from different densities and tracked the eclosion time, survival, and size of the subsequent generation. Our preliminary data shows no significance when comparing the weight of the offspring and the density they were raised in and only displays a significance due to sex. Additionally, developmental density seems to have less of an effect on male flies than female flies as females raised in medium density have a slight advantage in number of offspring over those females raised in high density with those raised in isolation having the lowest fecundity. We are in the process of gathering data for 10 replicates of each pairwise cross. This research will help us contribute to our knowledge and understanding of the effects of population density on the fecundity and social interactions of different generations of Drosophila, as well as other organisms.

Mentor(s): Baltzley, Michael;Latham-Scott, Kristin

Tate, Tayler;Manju, Isaac

The Effect of Urban Evolution on White Clover (Trifolium repens) in Salem, Oregon

Urbanization results in major changes to ecosystems which serve as important drivers of evolution. The Global Urban Evolution (GLUE) Project aims to test phenotypic clines of white clover in cities across the world to identify environmental factors that influence urban evolution. Water stress can be higher in urban areas and can reduce the growth and productivity of plants. Some white clover (Trifolium repens) are cyanogenic, producing hydrogen cyanide (HCN), a simple Mendelian trait that can be genetically and phenotypically tested. As participants in the GLUE project, we studied the frequency of cyanogenic white clover in 40 populations along an urban-rural gradient in Salem, OR. We analyzed the relationship between the frequency of cyanogenic individuals in a population and distance from the city center as well as soil moisture. No trend was found between soil moisture and HCN production, suggesting that soil moisture is not

influencing the evolution of HCN frequencies in white clover. There was a positive trend between the frequency of cyanogenic individuals and distance; however this trend was not statistically significant, potentially due to Salem's small size compared to other previously tested cities. This general positive trend seen in other cities around the world suggests that urbanization could have an effect on the evolution of white clover.
Mentor(s): Howard, Ava;Hopkins, Gareth

Session: 1. Deaf Studies and Professional Studies

Tovar, Sarah;Shinkle, Stephanie;Gallo, Mackenzie

Pseudo mental health disorder assessment

AbstractRoad Rage Disorder (pseudo mental health disorder) is a persistent disorder that causes an individual to experience a rapid change in mood and temperament within a very short amount of time while driving. This presentation will define Road Rage Disorder and normal driving behavior. Road Rage Disorder is diagnosed using multi-modal procedures including clinical interview, the DAEI assessment and field observations. Validity and reliability are addressed to provide evidence that the disorder can be generalized the population. The presentation will summarize the risks and consequences of the diagnosis. Consider how cultural may influence the diagnosis, ethical considerations, provide samples of the questionnaire and clinical interview, and treatment modalities.
Mentor(s): Lin, Chien-Chun

Johnson, Savannah Johnson

Code-Blending in ASL and English Bilinguals

This presentation examines various approaches to the simultaneous production of spoken and signed languages and their popularity among non-coda, bimodal bilinguals. Code-blending is the production of English and some coded form of American Sign Language (ASL). It has long been the primary method for bilingual communication attempts. The literature thus far is divided on how successful code-blending is, yet it is still used among different subgroups of sign-speech bilinguals. Six previously identified

characteristics of code-blending were applied to this study. The methodology includes presenting participants with three simple prompts and asking them to respond in a bimodal fashion. Production was analyzed for six distinct code-blend methods and identified that English Base-Language code-blends were most common among the participants by a wide margin.

Mentor(s): Darden, Vicki

Session: 1. English Studies

Hannah, Madeleine

A Changing Understanding of Writing

Mentor(s): Paraskevas, Cornelia

Bumgardner, Cheyanne

Bozoome: How to Create Your Own Language

Language consists of multiple components, hierarchically organized. To better understand how language functions, I created a new language using research and a computer program named VulgarLang. The result of this project is my constructed language, which I call Bozoome. I determined a varied set of consonant and vowel sounds based on common features across languages, decided the allowed amount of syllables per word (minimum of one, maximum of five), established prefixes and suffixes (prefixes are allowed up to two consonants, whereas suffixes are only allowed one), and phonological rules ("Consonants followed by a vowel become voiced"). With this foundation, I then classified words into word classes, determined noun gender (grammatical masculine and feminine), and constructed phrase structure rules that would create grammatical sentences in Bozoome. The VulgarLang program then used the language features I had established to create charts and a dictionary for Bozoome.

Mentor(s): Paraskevas, Cornelia

Tellvik, Sean;Mawhirter, Mindy

Nguvian: A Voiced, Antonymous Conlang

Constructing a language involves significant understanding of linguistic principles that exist at the core of every language. In this way, inventing a conlang requires an understanding of what a language can be and, from there, the rules can be exploited in order to serve the purposes of the new language. When developing Nguvian, we began to understand the complexity of linguistic structure, from determining phonemes, morphemes, and rules to generating sample words and sentences that test the possibilities and restrictions of our conlang. The most challenging aspect of building a conlang is trying to show the development of the language hierarchically, artificially -- attempting to build a language from scratch while maintaining the natural flow of language structure, from sounds to sentences. We believe the most unique features of Nguvian include the exclusive use of voiced over voiceless phonemes, the requirement that only one vowel sound be used for each word (with the exception of acronyms), and the heavy reliance of antonymy in word generation. This project showcases some of the linguistic possibilities of a language that developed from its foundational features into something unique while maintaining the core properties shared across languages.
Mentor(s): Paraskevas, Cornelia

Session: 1. Environmental Awareness

Alsaif, Anwar

Air Pollution

Air pollution is a major problem in the United States and the entire world. Exhaust from automobiles produces much of air pollution in the world. The engines of the cars produce poisonous gases such as carbon monoxide and one of the most harmful greenhouse gasses, carbon dioxide. Finding solutions to reduce air pollution from cars can include using public transit, walking and riding bicycles.
Mentor(s): Pettenger, Mary

Calder, Carson

Clothing Waste

The purpose of my research is to find more environmentally friendly alternatives to

ACADEMIC EXCELLENCE SHOWCASE

disposing of clothing in the trash. Statistics show that in the past 20 years, the volume of clothing Americans waste each year has increased from 7 million to 14 million tons, or a shocking 80 pounds per person. By using alternatives such as donating, selling, or reusing clothing, we can start to reduce the tremendous amounts of clothing waste. A simple solution is already present for this complicated problem: reduce, reuse, and recycle.

Mentor(s): Pettenger, Mary

Hall, Sophie

Drowning In Plastic

Today in this world, plastic has become a major problem. There are approximately 300 million tons of plastic being made each year worldwide, and only 10 percent of it is being recycled into something new. As a result, tons of plastic is being thrown away. The plastics you throw out don't always make it to the landfills, approximately 8 million metric tons ends up in rivers, lakes, and ultimately in the ocean. This project focuses on the damaging effects plastic waste has on marine life, and explores and compares the waste management practices in developing countries to that of the United States. Some developing countries like, Jamaica do not have the same economic stability, or opportunities to properly dispose of waste in comparison to the U.S. Still, however, the people of Jamaica are fighting for a change, and are going to extreme lengths to save their land, wildlife, and oceans. By changing our lifestyle here in the U.S, and by supporting organizations like Greenpeace, and 4 Ocean we too can help give Jamaicans, and other third world countries a fighting chance to save our precious planet from drowning in plastic.

Mentor(s): Pettenger, Mary

Williams, Rachel;Williams, Morgan

Earth Day Every Day: plastic bag prevention with t-shirt tote bags

Did you know that the average American family takes home about 1,500 single use plastic bags a year and only 1% are recycled? Plastic is so harmful to the environment, not only in the way that it is produced, but also in the way that plastic is disposed of.

This is why, for Earth day, we held a booth to not only educate people about plastic bags, but also to offer them an alternative in the form of a t-shirt tote bag. In this way, we are keeping more plastic bags from entering landfills and the ocean as well as re-purposing old t-shirts. Join us to learn about the harmful effects of plastic bags and how you can make your own t-shirt tote bag.
Mentor(s): Pettenger, Mary

West, Chris
Ending plastic straw use through social media.
Anyone who has watched the now infamous video of the sea turtle with the straw stuck in its nose has, like me, had that sick sinking feeling in their stomach. I know I have used tens of thousands of straws in my lifetime, and to this day every single one is still in our environment somewhere. I, like many other Americans feel obligated to try and change to biodegradable alternatives to plastic straws. Plastics in our environment is a huge issue and it can seem very daunting to think about ways to stem this ever growing issue. My plan is to start small with an awareness campaign for the Salem area on social media. This campaign will invite local restaurants to a Facebook page that not only highlights cities and states across America that have switched to compostable straw alternatives, but it will also give links to companies that provide compostable straws. What will make this campaign work is support in the form of likes by local residents of Salem and surrounding areas (like mammoth). Together we can create a narrative in our community that shows the support for plastic alternatives. Let's make this happen before it's too late.
Mentor(s): West, Chris

Bynum-Lewis, Jared
Environmental Economics
Mentor(s): Pettenger, Mary

Chayse, Jon
E-Waste Impact

This research examines the impact of e-waste, and the potential solutions for reducing it. Specifically, the impact of improper disposal of consumer electronics such as cell phones is demonstrated. Solutions for reducing the amount of waste and overall consumption are also explored.

Mentor(s): Henkels, Mark;Pettenger, Mary

Oba, Nonoka

Food waste; what a waste.

Food waste remains a critical global issue. According to the Food and Agriculture Organization (FAO), 1.3 billion tons of food, or one-third of the total food produced globally, is lost or wasted each year, amounting to an economic loss of $750 billion. The United States is also the largest producer of food waste with a staggering 40 percent of food wasted each year. In addition, the environmental impacts of food waste are devastating with a large carbon and methane footprint. Food waste generates more greenhouse gas emissions than any country in the world except for China and the United States. Most of the greenhouse gas emissions released in food waste are in the process of production and shipment. In addition, the disposal process also causes methane gas emissions. The core of this problem is overproduction which is created by the food company and our demand. As we all know, food is an absolute necessity for all human beings; therefore, the issue is important to solve and we need to change our mind regarding food consumption.

Mentor(s): Pettenger, Mary

Bosquez, Isaac

Getting Rid of Trays in Campus Dining to Lower Food Waste

Mentor(s): Pettenger, Mary

Abel, Samantha

Greening the Red

Educating the public about the negative effects of plastic waste as well as available green feminine hygiene products is essential to finding solutions to problems than can

be beneficial to both people and the environment. Feminine hygiene is a necessity to any woman of reproductive age, from after puberty until menopause. The sanitary napkin or pad is the most widely used feminine hygiene product in the country. Pads, along with tampons, are single-use plastics that often contain chemicals harmful to female genitals. A simple, reusable alternative can protect your body: the cloth pad. Making the switch from disposables to reusables is not just safer and a money saver for a user, but is an environmentally-friendly choice and helps cut back on plastic waste. Mentor(s): Pettenger, Mary

Arceneaux, Ayanna

H2o on the Go

Mentor(s): Pettenger, Mary

Alsuwayyigh, Abdulrahman

How Cutting Trees for Palm Oil Affects Orangutans

Mentor(s): Pettenger, Mary

Dickinson, Felicia

How Poaching and Trophy Hunting Impacts Our Future

Poaching and Trophy Hunting are issues that are not as public as they should be. Black markets and millionaires with extra time on their hands are putting treasured creatures at risk for extinction. Come learn about the animals whose lives hang in the balance and the ways we can help them and ourselves achieve a sustainable, beautiful world. Mentor(s): Pettenger, Mary

Potter, Brianna

Naturally and Humanly-Impacted Landscapes in Oregon

This poster-presentation reflects on landscape change through a geographic perspective that links human and physical components in the environment. Using photography, several of Oregon's landscapes and features are used to show how this state has been shaped through human and natural forces. Clear-cutting, building of

dams, a growing population can all force changes to an environment and the species that inhabit the area. Earthquakes, tsunamis, wildfires, global warming, and climate change can also affect a landscape and change the environment. The knowledge gained through this interpretation has helped with understanding how the Earth is continuously changing due to forces we sometimes can, but often cannot, control.
Mentor(s): Pettenger, Mary;Huston, Shaun

Kennedy, Cam
Plastic Beach
Mentor(s): Pettenger, Mary

Strickland, KJ
Protecting the Honeybee
Honeybees are pollinators that play a huge role in our ecosystems. They are very important in supporting plant biodiversity, conservation and crop production. Over the very recent past, the state of honeybee has been in trouble. Honeybee populations in Oregon, as well as around the US have been declining. The purpose of this presentation is to educate the community on what is happening, and what steps they can take in order to help turn this arou
Mentor(s): Pettenger, Mary

Cardenas Garcia, Bryant Cardenas Garcia
Reducing Plastic One Cap and Gown at a Time
Mentor(s): Pettenger, Mary

DeBello, Jeremiah
Russian Oil Spills
The topic I chose for this project focuses on raising awareness about the Russian Oil spills, and how those spills compare to off coast oil drilling in the Pacific North West. The project will discuss in detail about the devastative oil spills in Russia, while also outlying preventative measures that Oregon, Washington, and California can take in

order to prevent such devastation. The main focus of attention will be on Russia, and how the World can help this country from destroying natural wildlife and personal lives, there are plenty of lessons we can learn from these spills. That will be another topic of discussion within this project, which is the next step in human oil consumption. Will an opportunity of clean, renewable energy for every country present itself? Or will we always rely on fossil fuels for energy. Overall, this project presents problems, and solutions to a global threat, with the intention of raising awareness about Oil spills and preventative measures.

Mentor(s): Pettenger, Mary

Kisaberth, Nate

The Effects of Beef on the Environment

While cattle and beef are a large part of US history and food production, their impact on the environment is just as prominent. This presentation will take a closer look at the beef industry and their policies, as well as the eating habits that encourage this mass production and negative environmental impact. Attendees will gain a better understanding of how the beef and cattle industry affects the environment, specifically in regards to greenhouse gas emissions caused by cattle.

Mentor(s): Pettenger, Mary

Mora-Flores, Nicolas Mora-Flores

Water Pollution: Plastic Crisis

The purpose of this presentation will be to inform the public about the effects of polluting the water with plastics on the environment, wildlife, and humans. The presentation will be divided into four different points. The first one would be the history of water pollution. The second would be the main stakeholders of the issue of pollution. The third would be the effects of pollution on humans, wildlife, and the environment. The final one would be the solution of what the average person can do to help reduce water pollution via plastics, and introduce people to different organizations that are trying to fight water pollution, such Greenpeace, Sierra Club, etc.

Mentor(s): Pettenger, Mary

Kane, Adam

Water Use at Western Oregon University

The purpose of my project is to examine water use in the area and see what could be done to decrease use and save resources. In such a wet climate like Oregon we tend to take the water we have for granted and I want to change that perception and show what an individual can do to conserve

Mentor(s): Pettenger, Mary

Browe, Johnathon

What is the cost of your clothing?

When you are out buying your new T-shirt, pants or dress do you ever think do I really need this? The clothing and textile industry is globally the 2nd largest business in the world worth $3,0000 trillion making it hard to change the way things work all at once. Environmentally the textile industry causes damage to the environment in multiple ways. It uses massive amounts of water to produce the cloth that is needed. Each year 80% of discarded clothing ends up in a landfill rather than be repurposed. This keeps happening because human beings are accustomed to buying new things when they feel like it or need something for a new event. There are numerous problems with making changes. Clothing manufacturers and stores make money from selling clothing, and making changes may increase the cost of clothing for some people. In addition, some people could lose their jobs. However, there are small changes that could be implemented to help lower the impact on the environment. The clothing industry could use more sustainable fibers to make clothing. Consumers who discard clothing, instead of sending it to the landfill they can donate it. People can even buy less and wait until they absolutely need more clothes.

Mentor(s): Pettenger, Mary

Session: 1. Forensic Anthropology

Crawford, Alexandra

Animal Damage to Human Bone

Animal Damage to Human Bone   The following experiment will focus on the level of taphonomic damage that Pacific Northwest animals do to bone and tissue. This will be examined through the use of pig neck bones, in an attempt to mimic the effects on human bone. The experiment will be over the course of a week in respect toward time and efficiency. The bones will be placed in a forested area, where they will be bolted down onto trees to limit the possibility of animals taking them. This area's primary carnivore is the Canis latrans, thus the expectation is that teeth marks on the bones will belong to the coyote. A hunting camera with night vision will be setup to monitor the location and confirm the taphonomic agent. The camera will be attached to a tree, close enough to see any movement. Any indentations, scratches, or other marks will be thoroughly documented and examined. Since the experiment is primarily focused on animal influence, the general decay of the tissue will not be the main focal point, however it will still be taken note of if there is an increase of animal activity. This research will be able to aid future forensic studies on the impact of animals on bones. Mentor(s): Weitzel, Misty

Larson, Jenae

Mortuary Ritual: The Forensic Significance of Grieving Finger Amputation

The principle objective of this research is to study the self-inflicted dismemberment of an individual's fingers and how a forensic anthropologist might recognize the signs of this grieving ritual. Ritual finger amputation is the removal of one's fingertips as the physical representation of emotional pain during the grieving process. This ritual is specific to women in places such as the Dani tribe in Papua and often occurs upon attending the funeral of an extended family member or a child. This ritual is performed by tying a string tightly around the upper half of the finger and leaving it tied for about 30 minutes. This allows the finger to essentially become numb for a "painless" removal. The finger segment is removed by using an ax and the open sore is then singed to prevent bleeding and form a callous. They then save the finger until it is dried up so it can be either burned or stored somewhere specific. It is crucial for forensic anthropologists to have knowledge about sharp force trauma and the effects of burning

because there is always the possibility of finding cut marks from the ax and even healed fractures within the bone. More often than not, forensic anthropologists working among these populations will have to examine human remains that will be missing a distal phalanx or they might come across a distal phalanx in isolation. It is important for forensic anthropologists to be aware of such grieving rituals.
Mentor(s): Weitzel, Misty

Pacheco, Christopher;Matthews, Morgan
Patterns of Blunt Force Trauma from Different Weapons Exerted on Bone
Abstract:The purpose of this study is to determine the patterns of blunt force trauma by a variety of dull weapons on fleshed bone. We will inflict blunt force trauma using a baseball bat, frying pan, and hammer on fleshed Sus scrofa remains. We will then analyze the different types of damage each weapon inflicts on the remains. The plan is to collect results examining the severity of damage received by each weapon type. Our hypothesis is that a hammer will conduct the most damage on the fleshed bone since it exerts the highest amount of force within a small surface area.
Mentor(s): Weitzel, Misty

Pitman, McKenzie;Morikawa, Lea
The Forensic Effect of Soaking Bone in Cleaning Agents
The Forensic Effect of Soaking Bone in Cleaning Agents Throughout history, perpetrators have devised countless methods to rid or alter evidence to avoid getting caught. In attempts to conceal bone evidence via dissolving, one who does not have access to powerful acidic agents may resort to household cleaners which are advertised as powerful yet easy to obtain. As forensic investigators, our goal is to identify signs of alteration done by different cleaning agents. Over the course of five weeks, we will be soaking beef femora in five different liquids: water, paint thinner, Coca-cola, Draino, and bleach. We will be photographing and recording any changes such as discoloration or weight difference made to the liquid or bone itself. We predict that due to the differing chemical makeup of each cleaner, it will be easier to distinguish between agents and their effect on the bone.

ACADEMIC EXCELLENCE SHOWCASE

Mentor(s): Weitzel, Misty

Session: 1. History Senior Seminar Presentations

Jones, Austin

Confessionalization and Actualization in Calvin's Geneva

Actualization and Confessionalization in Calvin's Geneva This paper identifies the links between Calvin's theology, as laid out in his exegetical, political, and administrative writings and the policies that he put in place during his tenure as preacher in Geneva. The process of actualized theology which occurred within the spheres of liturgical, sacramental, and ecclesiastical changes demonstrates a more direct link between Calvin and the construction of a religious community in Geneva than the Confessionalization thesis holds. The paper addresses the historiographical failings of both historians who have sought to politicize Calvin to suit modern ideological frameworks, and historians who have ignored the links between structural and theological adaptations that occurred during the Reformation. The paper looks specifically at the development of eucharistic theology by Calvin, and how that intellectual development shaped the sacramental customs of the Lord's Supper and the liturgy surrounding it. Additionally the paper observes a connection between Calvin's thought on reconciliation within the Bible, such as the process of laying on hands, and the approach Calvin had towards punishment and reconciliation of sinners and criminals within the Genevan community. This paper argues that the application of the Confessionalization thesis, whereby the state leads the process of confession building in a preceding movement towards Early Modern centralization, does not apply to the early Genevan Reformed church and the process of confession building was, instead, led principally by Calvin.

Mentor(s): Doellinger, David

Bell, Alexandra

Confronting The Early Relationship Between the United States and Saudi Arabia

Saudi Arabia has remained a staunch ally of the United States since 1945, the early

days of the Cold War. The U.S. focused on Saudi Arabia as an ally in Southwest Asia mainly because of the U.S.'s need for oil in a modernizing world. But as the Cold War continued, Saudi Arabia served as a strong agent against the spread of Communism in the region. As the self-proclaimed Islamic leader to the Arab world, Saudi Arabia held, and continues to hold, significant influence over Arab nations in Southwest Asia. The U.S.'s promise of protection for the Kingdom of Saudi Arabia has lasted through the Cold War, which insinuates that the U.S. planned to use its connection with Saudi Arabia to expand its influence over the wider region known as the Middle East. Letters between U.S. presidents and the Saudi Arabian monarchy, letters between the U.S. State Department and officials of Saudi Arabia, and Western newspaper articles covering Saudi Arabia between 1945 and 1979 are the main sources used to examine the relationship established between the U.S. and Saudi Arabia. The U.S.'s intention in Southwest Asia was not only to stop the spread of Communism or protect American oil, but establish an authoritative presence in Southwest Asia through an alliance with Saudi Arabia.

Mentor(s): Rector, John

Solomos, Damon

Eugenics In Practice At The Oregon State Mental Hospital

This paper explores the use of Eugenics and radical experimental therapies as societal control methods. Using patient case files from the 1920s at the Oregon State Mental Hospital, the story of two patients that were committed is explored. Each patient had treatment and, in some cases, abuses at the hands of the state institutions. In many cases treatment was used as control under the guise of cure. Using the works of social and medical historians to place context on the socially acceptable practices of the time, the paper builds an understanding of the state mental hospital. Through government files such as legislation, patient medical files, Eugenics Board of Oregon files, and death certificates, the patient's life stories are recreated and explored. With insufficient staff, insufficient funding, and sever overcrowding of the state institutions, the need for control of patients became paramount. Treatments like Eugenics, hydrotherapy, and isolation and restraint became control measures hidden behind a veil of treatment and cure.

Mentor(s): Doellinger, David;Jensen, Kimberly

Alvarez, Andres

Immigrants, Mental Health, and the Oregon State Hospital

This Senior thesis examines the treatment and care of immigrants who found themselves within the confines of the Oregon State Hospital in the early 20th century. During the Progressive Era (1890-1930) there was a rise in the use of mental health institutions and along with it came patients from various backgrounds. Many patients were admitted either voluntarily or by others in good faith for recovery from their mental ailments. Others however, fell victim to mental institutions being used to work against marginalized groups during this time. Two case files show individual examples of immigrants who were put in the State Hospital in the early 20th century and display how they were treated within and without the walls of the hospital. With the support of secondary sources from scholars like Joel Braslow, Susan Burch, and John D'Emilio and Estelle B. Freedman, practices within the Oregon State Hospital are analyzed. There is also an emphasized investigation on how mental health institutions operated against marginalized groups in the early 20th century.

Mentor(s): Jensen, Kimberly

Ragasa, Dayna

Mental Hospitals and their Effect on Race and Gender in the 1920s

Mental illness in the United States has been part of a complex history. Many details of mental hospitals and the treatment of its patients have been omitted from popular literature and media. These patients were subjected to harsh treatment and forced to undergo extreme therapies that doctors claimed would improve their condition. In particular, female patients were also affected by the events that occurred during the early twentieth century, namely World War I and the Great Depression, and the stigmas of race and gender that they caused. Mental illness remained an understudied topic for much of the nineteenth and twentieth centuries, but historians in recent decades have taken up the task of studying mental illness and revealing mistakes and challenges of the past. This paper incorporates the work of these historians, such as Joel Braslow and

Gerald Grob, as well as the examination of two female patient files from Oregon State Hospital in the 1920s. These patients and their institutionalization served as a reflection of society and how it affected the concept of mental illness during that time period.
Mentor(s): Jensen, Kimberly

Cheeley, Brant

Misinformed but Well Meaning: United States Newspaper Coverage of the Bosnian War From 1992-1995

The Bosnian War and the atrocities that accompanied it headlined media sources around the world from 1992 to 1995. Journalists who covered the war later produced memoirs of their time within the region. These accounts influenced the views and language of other journalists who wrote for newspapers in the United States at the time. This can be seen through the development of common language among journalists, such as the term "ethnic cleansing." This project examines articles from United States newspapers, from their early coverage of the conflict to their later efforts to encourage American intervention in Bosnia. These newspapers guided their readership to support an interventionist policy by the United States, which was realized in the Dayton Agreement.
Mentor(s): Doellinger, David

Kennedy, Hudson

Restraint as Therapy: Institutional Control at the Oregon State Hospital in the 1920s

This thesis examines the experiences of female patients in mental health institutions in the early twentieth century using two patient medical files from the Oregon State Hospital in the 1920s as a case study. The two patient case files are examined for their content regarding the treatments given to patients in order to determine the rationale behind the treatments. This rationale would often cross the line between treatment and discipline. The treatments were chosen in reaction to the behaviors of the patients and were an attempt to control their bodies. The treatments examined are put into context with a comparison to the greater psychiatric medical field as presented by secondary

scholarship. This scholarship includes the works of both medical historians such as Joel Braslow and social historians including John D'Emilio and Estelle Freedman. Through the examination of the two case files and secondary scholarship the therapeutic rationale of physicians is inspected. This thesis takes the narrative of two female patients from the Oregon State Hospital and orients them in the medical field of the period. An evolution of psychiatric treatment occurred from the 1890s through the 1950s and by analyzing the field in the 1920s this thesis presents a look at one point within this change.
Mentor(s): Jensen, Kimberly

Morales, Marcos

The Creation of a King: How Geoffrey of Monmouth Influenced the Story of King Arthur

Geoffrey of Monmouth (c.1095-1155 CE) is one of the most influential writers on King Arthur. Prior to Geoffrey's History of the Kings of Britain, there was little to no mention of the legendary king in early medieval historical texts. Geoffrey's development of Arthur paved the way for future authors and storytellers to implement Integrate King Arthur in their work, developing and expanding the legend. This paper will utilize Geoffrey of Monmouth's History of the Kings of Britain and identify its influences in other Arthurian tales from the medieval period (eleventh century to sixteenth century) including Marie de France's Lais, Thomas Malory's Le Morte D'arthur, and the Welsh folktale compilation, the Mabinogion. Analysis of these literary and historical sources demonstrates that other medieval authors used Geoffrey's tale of King Arthur for political and social advancement when writing for nobility and also adapting and adding to the Arthur legend to fit their own cultural norms. Identifying how Geoffrey's History of the Kings of Britain was adapted and spread is important in identifying what causes myths and legends to catch on and last well beyond the time of their creation.
Mentor(s): Swedo, Elizabeth;Hsieh, Bau-Hwa

Eidler, Alexander

The Teutonic Order and the Baltic Crusades

The Baltic Crusades began during the Second Crusade (1147-1149) but continued well into the fifteenth century. Unlike the crusades in the Holy Lands which were initiated to retake holy cities and pilgrimage sites, the Baltic crusades were implemented by the German archbishoprics of Bremen and Magdeburg to combat pagan tribes in the Baltic region which includes Estonia, Prussia, Lithuania, and Latvia. The Teutonic Order, which arrived in the Baltic region in 1226, was successful in their smaller initial campaigns to combat raiders, as well as in their later crusades to conquer and convert pagan tribes. As an Order that focused on Eastern Europe and the Baltic, the Teutonic Order had to balance their relationship between both the papacy and other Christian kingdoms near the region, particularly the Holy Roman Empire. Through analysis of medieval chronicles and scholarly research the Teutonic Order was able to successfully balance the support of the Holy Roman Empire and the papacy, to effectively become a powerful entity of conquest and conversion in the Baltic region.

Mentor(s): Swedo, Elizabeth

Reutlinger, Owen

You Say You Want A Revolution: Slavery in Haiti and the United States in the early 1800's

This thesis will explore the remarkable success of the Haitian Revolution and its impact on slavery in our country. The Haitian Revolution has been covered numerous times by historians and has sparked different interpretations, theories, and conclusions. One interesting angle of analysis is the white French plantation owners overall role in the event. Their cruelty, poor workforce management, moral shortcomings, and greed fuelled the slave revolt, and the slaves successful revolution shaped how the United States reacted and how it adapted its version of slavery. This paper examines the failings, errors, and miscalculations of plantation owners while also considering what led the slaves to rebel. I argue that the plantation and slave owners inadvertently helped advance the revolution and when news of the Haitian revolt and refugees arrived in America, it ironically strengthened the pro-slavery views and policies in the United States in the early 19th century.

Mentor(s): Rector, John;Swedo, Elizabeth

Other Presentations

Norman, Marlie;DeLonge, Natalie;Azorr, Sydney;Householder, Joshua;Pablo-Otoman, Kailen;Roos, Joseph;Mehciz, Madeline

Fitness Without the Gym: Benefits of Stair Climbing

Purpose: To examine the effectiveness of stair climbing at the Health and Wellness Center (HWC) and WOU Stadium. The goal is to help individuals reach daily fitness recommendations and improve cardiorespiratory fitness. Methods: These two buildings were selected out of all campus buildings as the most likely place for stairs to be incorporated into a workout. The stair height, stair width, and linear distance were all measurements taken in order to help determine heart rate, VO2 Max, and energy expenditure (METS) of people who are descending and ascending stairs.   Results: Stairs in HWC had a height of 6.5 inches, width of 79.25 inches, and linear distance of 178 inches (bottom), 129 inches (middle), 142 inches (top). The stadium stairs had a height of 7.5 inches, width of 36 or 41.5 inches (middle section only), and linear distance of 492 inches (all sections). Applications: Results were used to create a public awareness poster which can be placed near staircases in both locations. Incorporating stairs into a workout as part of high intensity interval training, or using the stairs as a workout themselves has been shown to improve cardiorespiratory fitness. These buildings both provide a quick yet efficient workout for the target population. Workouts can be performed any time through the day, and are great for those already on campus as they are easily accessible and cost-free.

Mentor(s): Caster, Brian

Session: Other Presentations

Broughton, Megan

Palliative Care in Long-Term Care Settings

Palliative Care Education for Healthcare Staff Working in Long-Term Care Abstract Palliative care (PC) changes the focus of treatment from prolonging life to alleviating

ACADEMIC EXCELLENCE SHOWCASE

suffering caused from debilitating, untreatable illnesses and promoting quality of life (QOL). The purpose was to examine the knowledge gaps related to PC and investigate if increasing knowledge, confidence, and preparedness within healthcare staff can promote QOL and dignity for the elderly living in LTC facilities. A literature review using research databases CINAHL and PubMed was conducted, and eighteen articles appropriately addressed the aim. Evidence showed that educational trainings to healthcare staff about PC increased their knowledge and confidence. Staff were more likely to initiate, suggest, or perform interventions focusing on QOL and maintaining dignity after training. Consistency in care, sharing a common language, and shifting the treatment approach all resulted in increasing QOL and dignity for LTC dwelling individuals. Recommendations for future practice and research include implementing a facility tailored education program on PC and addressing the current knowledge gap surrounding PC and older adults living in LTC facilities.
Mentor(s): Najjar, Rana

Session: Other Presentations

Norman, Marlie;DeLonge, Natalie;Azorr, Sydney;Householder, Joshua;Pablo-Otoman, Kailen;Roos, Joseph;Mehciz, Madeline

Step So You Don't Forget: Stair Climbing During Study Breaks

Purpose: The purpose of this study was to assess stair climbing in the RWEC and Hamersly Library and find a healthy way to create a study break on campus. Both buildings are used by students, faculty, and staff that may underestimate the power of increasing heart rate and taking the stairs rather than the elevator. This study is important because if stair-climbing in these buildings provide the minimum requirements for cardiorespiratory benefits, both of which have free public-access, then it would be a viable exercise suitable for promotion for the general public and the building users who have not yet taken advantage of the stairwells for their fitness journey (Teh, K.C., & Aziz, A.R., 2002). Methods: Measurements were initially taken for all buildings on campus, with the two buildings selected based on academic function and breadth of user groups. Stair height, width, and linear distance were measured, and these

distances used to calculate energy expenditure. Application: Results were used to create informational posters near staircases to help increase usage of stairs in these buildings, and provide actual energy expenditure due to stair climbing rather than elevator use. By using the stairs, it can increase test scores, productivity, and positivity in the workplace and around campus when people are getting a free workout in while taking the route they were going to use either way.

Mentor(s): Caster, Brian

Session: 1. Interplay of Science & the Arts: Open Session

Frey, Eric;Vargas, Nelina;Marlas, Nicholas Marlas

#WOUBorderWall a discussion on Interactive Art on Campus

The #WOUBorderWall is an Interactive Installation Artwork designed to offer a free speech area and opportunity to create a discussion and debate on border security. Artist Eric Frey will host a panel of participants in the project for a question and answer session on the process and results of the project. Attendees to AES will be invited to add their art or commentary to the wall throughout the day with acrylic paint and spray paint.

Mentor(s): Park, SungEun

Wanderschied, Nicholas;Batenhorst, Eva

The Effects of Larval Population Density and Social Interactions on Adult Fecundity In Drosophila melanogaster

Drosophila melanogaster is a model organism for studying mating and fecundity behaviors. Previous research suggests flies raised in isolation have changes to olfactory and visual systems as adults. Due to a plausible relationship between olfactory and visual system development and mating, we hypothesized larval population density and social interactions will affect the size and eclosion rates of flies, which relates to fecundity. We raised larvae in high density (40 larvae/mL food), medium density (5 larvae/mL food), and in isolation, with none of the population densities food-limited. After eclosion, we set up nine different pairwise crosses of the adults (high-density

female x high-density male, medium-density female x high-density male, etc.) and recorded the effect of larval density on eclosion patterns, body size, and fecundity. Our preliminary data suggest that isolated larvae have a lower eclosion rate than larvae raised at medium and high densities. However, female flies raised in isolation and in medium densities are similar in size and are larger than flies raised at the high density. We will obtain a total of 10 replicates of each pairwise cross to gather more data for analysis. This research will contribute to the understanding of the effects of population density and social interactions on fruit fly behavior with possible applications to other organisms.

Mentor(s): Baltzley, Michael;Latham-Scott, Kristin

Rueda Barrera, Maria

Upward Bound Internship (CiP)

As a WOU Community Internship Program intern with Upward Bound, I engaged with students from Central and Dallas high schools with internship opportunities to help them develop professional skills and learn about career options. Being the Upward Bound Internship Coordinator, I was able to connect with a number of professionals and departments, including the State Capital, Salem Hospital, Causa, WOU Foundation and the WOU Theater Department. I was able to make new connections and gain develop skills that I will need in the future. I will be sharing details of my transformative experience working with these students and how we have the opportunity to impact their lives in a meaningful and needed way.

Mentor(s): Lopez, Karina;Break, Alternative

Baker, Kayla

Why Art Matters in an Increasingly Analytical World

Historically, through the combined forces of scientists and artists, there have been periods of revolutionary discovery and growth in the sciences. However, in today's society, science and art are often considered separate disciplines and in some instances are even seen as conflicting areas of study. I will discuss the current debate of STEM vs STEAM in primary educational settings and the lack of scientific literacy in

the United States today, as well as integrate important research on how art can combat public disinterest in scientific research and policy. I will examine the importance of science based art, and the renewal of artistic and scientific collaboration. I will also explain my process of taking a scientific publication and creating three art pieces: a visual art piece, a written art piece, and a movement art piece, all based on the publication "Jellyfish extract induces apoptotic cell death through the p38 pathway and cell cycle arrest in chronic myelogenous leukemia K562 cells". Finally, I will enable the audience members to create their own science-based art piece.

Mentor(s): Haberman, Karen

Session: 1. Leadership In Nursing & Healthcare: Process Improvement

Mueller, April;Oliva, Adrian

Assessing For Trauma-informed Physical Environments

AbstractAfter the Adverse Childhood Study done by Kaiser Permanente in the 1990s showed childhood trauma was extremely common, great effort went into introducing trauma-informed care into health practice. Trauma-informed care focuses on a person's physical, emotional, and psychological safety history and seeks to avoid re-traumatization. For clients seeking care in a behavioral health clinic, the environment plays a significant part in how safe they feel. Using a trauma-informed environmental component checklist, three Polk County Youth and Family Behavioral Health clinics were assessed. The results showed problems in three main areas: lack of signage, waiting room appearance, and maintenance. Nursing databases were used to complete a literature review for current research for recommendations pertaining to these topics. Recommendations were formed based on the overall results of the literature review. The recommendation, along with the results from the review, were presented to the stakeholders. Making improvements in those three main areas will help decrease possible triggers, make the environment more welcoming, and conform to trauma-informed care standards.AbstractAfter the Adverse Childhood Study done by Kaiser Permanente in the 1990s showed childhood trauma was extremely common, great effort went into introducing trauma-informed care into health practice. Trauma-informed

care focuses on a person's physical, emotional, and psychological safety history and seeks to avoid re-traumatization. For clients seeking care in a behavioral health clinic, the environment plays a significant part in how safe they feel. Using a trauma-informed environmental component checklist, three Polk County Youth and Family Behavioral Health clinics were assessed. The results showed problems in three main areas: lack of signage, waiting room appearance, and maintenance. Nursing databases were used to complete a literature review for current research for recommendations pertaining to these topics. Recommendations were formed based on the overall results of the literature review. The recommendation, along with the results from the review, were presented to the stakeholders. Making improvements in those three main areas will help decrease possible triggers, make the environment more welcoming, and conform to trauma-informed care standards.

Mentor(s): Docherty, Angela

Soto, Kelly

Breaking the Barriers: Improving Healthcare Access for Undocumented Immigrants

There are approximately 12 million undocumented immigrants (UI's) in the US. Within this population lie many barriers to quality healthcare such as lack of immigration reform and fear of deportation. In 2016, Americans taxpayers subsidized approximately $18.5 billion dollars for the last resort emergency services that UI's utilize, which would be significantly less if they had access to primary care services. The purpose of this work is to propose guidelines using evidence based research to help clinicians increase and improve healthcare access for UI's. Four electronic databases (PubMed, Academic Search Elite, Health Source and CINAHL) were searched using the following research question, "How can healthcare providers improve healthcare access and delivery for UI's". The evidence provides multiple solutions from individual grassroots to policy level interventions. The recommendations include social determinant assessments, grant funding for preventative screenings, cultural and linguistic competency training for healthcare professionals and building community partnerships to provide education to UI's about their legal rights, citizenship and English proficiency lessons.

Mentor(s): Najjar, Dr. Rana

Brehm, Josh;Case, Kristen

Developing a Media Campaign to Prevent Problem Gambling

Polk County's Family and Community Outreach was awarded $15,000 to create a media campaign to prevent Problem Gambling (PG) among adults. Two Oregon Health & Science University (OHSU) Nursing Students were brought in to aid in providing an evidence-based framework that would support the creation of the PG media campaign. OHSU students conducted research on PG using databases and by collaborating with local stakeholders in PG Prevention. Data were analyzed and organized into a modified logic model. It was found that adults between the ages of 18 and 54 have the highest risk of developing problem gambling, people who gamble are largely unaware of the signs and symptoms of PG and prevention strategies, media campaigns should focus on empowerment instead of shame or guilt, and using local landmarks and residents in media may promote a stronger response to the campaign. Recommendations for next steps include reaching out to PG Prevention to interview clients engaged in treatment for personal insights, using a survey at three- and six-months post-intervention to measure community impact, and creating a future video alongside the PG Treatment team to address barriers in seeking treatment.

Mentor(s): Warkentin, Patti

Green, Jodi;McBride, Rebecca

Improving Health and Wellness at Western Oregon University

AbstractThe purpose of this quality improvement project was to research the American College Health Association's (ACHA) National College Health Assessment (NCHA) to identify areas where Western Oregon University (WOU) could implement interventions to improve health and wellness of the WOU student population. Through the utilization of survey data presented in the NCHA, four focus areas were identified for improvement. The areas included were: increasing understanding of student health perception, increasing flu vaccination rates, increasing the perception of student safety on campus at night, and increasing student consumption of fruits and vegetables.

Through survey analysis, this quality improvement project suggested that time was the biggest barrier to students not living a healthier lifestyle and that students would feel safer on campus at night if there were cameras and more lighting. This project suggests collaboration between Oregon Health and Science University (OHSU) School of Nursing (SoN), Student Health and Counseling Center (SHCC), and Polk County Public Health to provide WOU students with an annual, free flu-clinic advocation for increased lighting at WOU to improve student perception of campus safety, collaboration between WOU Dining Services, SHCC, and OHSU SoN to implement workshops to educate students on basic elements of nutrition and the importance of healthy eating, and the establishment of a student wellness program to motivate students to live a healthier lifestyle will positively impact the health and wellness of WOU student population.Keywords: colleges and universities, students, campus safety, flu vaccination, nutrition, health perception, health, wellness
Mentor(s): Whittle, Tamara;Wimmer, Craig;Medzegian, Pam

StClair, Emily;Brockamp, Jack

Improving Sleep Quality by Educating and Identifying Barriers Among WOU Students
SLEEP QUALITY AND BARRIERS IN COLLEGE STUDENTS

1AbstractBackground: Western Oregon University's (WOU) Student Health and Counseling Center (SHCC) and the American College Health Association (ACHA) statistics conveyed need to increase sleep quality in college students. Poor sleep is associated with lower academic performance, impairs cognitive function and decreases reaction times. It causes fatigue, daytime sleepiness, stress, and underemployment. Objectives: Assess for barriers to sleep and develop sleep promotion interventions. Educate WOU students on the benefits of sleep and detriments of poor sleep. Methodology: The logic model was used to guide this project. Three sleep promotion events were completed: interactive education, sleep survey (n=93), and the distribution of educational materials and sleep hygiene kits. Results: The top three barriers identified: school demands, emotional and mental state, and life demands. 45% of students reported < 7 hours of sleep while only 23% rated their sleep as poor.

Recommendations: Promote services reducing stress, improving sleep quality, and teaching coping skills related to school and life demands such as the R&R room, wellness coaching, time-management classes, and sleep promotion events. Continuation of the first-year experience class. Utilize OHSU/SHCC partnership to further assess sleep needs and intervene.

Mentor(s): Docherty, Angela

Kotenko, Kseniya;Juarez Rodriguez, Daniela;Cruz Quintero, Maydoli

Increasing LGBTQ/Q Awareness at Talmadge Middle School

AbstractPrevious research has demonstrated that integrating an LGBTQ/Q curriculum is associated with increased levels of safety and decreased bullying at schools (Snapp, McGuire, SinClair, Gabrion, & Russel, 2015). The purpose of this project was to increase awareness of the LGBTQ/Q community among seventh graders at Talmadge Middle School (TMS). The main points were to develop and deliver two lesson plans that would teach the proper terms and definitions, as well as cover the issues faced by that community. Extensive literature reviews were performed using the PubMed and CINHAL databases. The main purpose of the literature reviews was to find ways to best deliver the academic content for students in that developmental age group. Pre and post-tests were conducted to assess the effectiveness of the lesson plans. There were 117 students who completed the testing. The overall outcome of the tests indicated that there was a significant increase in knowledge on the LGBTQ/Q community after the lesson plans were delivered. These findings suggest that the lesson plans can continue to be used as an impactful and effective teaching model for the rural, Talmadge Middle School's LGBTQ/Q curriculum.   ReferenceSnapp, S. D., McGuire, J. K., Sinclair, K. O., Gabrion, K., & Russell, S. T. (2015).   LGBTQ-inclusive curricula: Why supportive curricula matter. Sex Education,   15(6), 580-596. doi:10.1080/14681811.2015.1042573

Mentor(s): Docherty, Angela

Franco Maciel, Maria;Edwards, Jesse

Polk County Warming Centers

Abstract Purpose: Rural Polk County has limited resources for housing insecure individuals. The purpose of this project is to provide a warm place to stay during Polk County's coldest nights. The model for this project is a network of organizations and community volunteers that rotate hosting the warming center for individuals, families, and people with pets. Methodology: The process improvement model used was Plan, Do, Study, Act (PDSA) from the Institute for Healthcare Improvement (2017). A literature review was completed using CINHAL. The practices of agencies who offered similar services were reviewed. Community input and engagement was achieved through outreach events including information forums, volunteer luncheons, service integration meetings, and meetings with key community partners. Findings: Polk County has a growing housing insecure population. Polk County has no warming center or shelter for housing insecure individuals. Last year there was one casualty of the cold weather. Through a point in time count, approximately 223 individuals were recognized as homeless in rural Polk County (MWVCAA, 2018). Conclusion: Using faith partners and other organizations the warming center is a mobile center providing warmth to those in need during the winter months. The model has been created to be a sustainable service. It has effectively reached and provided warmth to those in need in Polk County.   References Institute for Healthcare Improvement. (2017). Plan-Do-Study-Act (PDSA) Worksheet. Retrieved from http://www.ihi.org/resources/Pages/Tools/PlanDoStudyActWorksheet.aspx   MWVCAA. (2018). Polk County (Oregon) Point in time count, 2018. Retrieved from http://www.mwvcaa.org/Archives/2018%20PIT%20Count%20Polk%20County.pdf
Mentor(s): Docherty, Angie;Warkentin, Pati

Session: 1. Political Science Research

Waldorf, Jason

Assessing the Information Security Environment at Western Oregon University
Mentor(s): Pettenger, Mary

Johnson, Owen

ACADEMIC EXCELLENCE SHOWCASE

Climate Change As a Threat to National Security

The United States military and the Pentagon strongly consider climate change to not only be real, but also one of the greatest threats to national security. Increased storm activity has destroyed multiple F-22s because of flooded Air Force bases. Rising sea levels are leading to the oceanic consumption of island-nations in Micronesia. The increased range of preferable conditions for mosquitos will lead to the spread of malaria wo. Climate change's effects on agriculture have created an environmental migration crisis within Africa and increasing the spread of HIV/AIDS throughout the continent. Every issue created by climate change around the world will come back to affect the United States either environmentally, economically, civically, or medically. Unless acted upon immediately, climate change will become the most dire threat to America as seen by its many symptomatic results.

Mentor(s): Pettenger, Mary

Abel, Samantha

Living With Beaver in the Luckiamute Watershed

Beaver have profound but controversial impacts on watershed quality. Beaver dams benefit salmonid fish and their feeding promotes riparian diversity. Due to these and other positive impacts on river geomorphology and overall watershed ecosystems, beaver are considered a keystone species. For humans, beaver activities such as dam building and tree felling are known to cause localized flooding of roads, associated culverts, and other properties and their feeding damages crops and trees. Based on an internship with the Luckiamute Watershed Council, this study explores policies that mitigate beaver-human conflict and benefit the natural environment, with an emphasis on alternatives to trapping, shooting, or relocation.

Mentor(s): Henkels, Mark;Pettenger, Mary

Tarabochia, Baily

Native American Policy

American's gained their full independence in 1783, after defeating the British in the Revolutionary War. Sadly, the same cannot be said for the original Americans; Native

Americans. From the beginning, Native Americans have been a prominent force in American history. The lands that America was built on were once their sacred ground used for ancestral activities. White settlers interrupted their world and conquered it for their own. Ever since Native Americans were first in the presence of outsiders, their quality of life has never been the same. Life to them once meant having free roam over the landscape, hunting and gathering on lands that they have been accompanying for thousands of year, spiritual relationships with animals and nature, etc. Now, all aspects of their lives are controlled and limited by the government, policy, and reservations. They have been forced to adapt and assimilate into the white American way of life, leaving behind their traditions, culture, and livelihoods. Except there has been a comeback within Native communities to restore and re-educate Native life. This poster will highlight the brief federal history regarding Native policy and how we got to where we are today. It will also include issues that Natives are experiencing on Tribal lands, with examples from local Tribes.

Mentor(s): Pettenger, Mary

Crosman, Cassandra

Should Autism Be "Combated?"

Should autism be "combated?" The goal of the Combating Autism Act of 2006 was to "combat," or to find a cure for autism." Under the medical model of disability, autism is commonly viewed as a disorder that should be eradicated or cured rather than a condition that can be reasonably accommodated and publicly accepted. There is a divide over the autistic* community and autism advocacy groups such as the Autistic Self Advocacy Network (ASAN), and autism treatment facilities and other groups that seek to cure or treat autism over which areas of autism legislation deserve the most attention and funding.The Combating Autism Act Reauthorization Act of 2014, now renamed as the Autism Collaboration, Accountability, Research, Education, and Support (CARES) Act of 2014, is the largest source of federal funding for autism services, early interventions, and autism research. While the legislation has helped to raise awareness of autism, there are n needs of the autistic community that have yet to be met, such as addressing the low graduation rates of autistic high school and college

students, as well as a high unemployment rate among autistic adults. Other needs of the autistic community include improving accessibility needs, affordable housing, and transitional services for autistic adults. After comparing the budgets of the original Combating Autism Act in 2006, to its reauthorizations in 2011 and 2014, I found that while the name of the act has changed, the goals of the original act to "combat" autism have not. The Autism CARES Act has taken some steps in the right direction by changing its name from the "Combating Autism Act," to the Autism Collaboration, Accountability, Research, Education, and Support Act. The name change shows respect towards the autistic community and supports autistic advocates who do not want to be combated, and have used the hashtag #StopCombatingMe on Twitter to protest the original name. However, through the extensive evolution of the Combating Autism Act, funding still is focused almost entirely on medical research due to the majority of federal funding coming from the National Institutes of Health (NIH). To improve the Autism CARES Act, it needs more involvement from autistic people as well as a redirection of federal funding from cure and treatment research led by the National Institutes of Health (NIH) to services that serve the needs of the autistic community. The Autism CARES Act expires in 2019. If the Trump Administration decides to renew the Autism CARES Act, to reflect current knowledge about autism and neurodiversity, funding for access to autism-related services should take priority over funding for research focused on causes, treatment, and prevention of autism.* = While it is commonly considered polite to use person first language when talking about people with disabilities, the majority of people in the autistic community prefer identity first language and are proud to identify as autistic, so I have chosen to use such language for my project.

Mentor(s): Henkels, Mark;Pettenger, Mary

Singleton, Juneau

The Libyan Civil War

In 2011, violent civil conflict broke out in Libya after government forces clashed with civilians protesting Muammar Al Qaddafi's long-standing regime. Rebel forces and government troops would continue to fight over territory until Qaddafi's army pushed

them back into Benghazi. It was at this turning point when the United Nations authorized NATO's air campaign. NATO's mission in Libya was not supposed to take sides in the war or enact a regime change, only protect civilian lives, as stated by UN resolution 1973. Upon closer examination of NATO's controversial air campaign in Libya, it becomes clear that they breached resolution 1973 and further destabilized Libya in the process, a conclusion that contrasts with most perceptions of the conflict portrayed in western media. This point is corroborated by several sources including personal accounts from Libyan citizens who were present before, during, and after the conflict. Libya is still engulfed in conflict today, with no stable government. Civilians that remain in Libya are still not having their basic needs met, and are constantly at risk of being tortured or killed by rogue militias.

Mentor(s): Pettenger, Mary

Session: 1. Queretaro: My Study Abroad experience

Cole, Zac

Viaje a México

In this session, I will share my study abroad experience in Querétaro, México, where I studied last summer. I will show pictures and videos of places I went and things I saw. I will also share how the experience changed me as a person, as a future bilingual teacher, and why it is great for any U.S. student to study abroad.

Mentor(s): Caceda, Carmen

Session: 1. Research and Praxis in Sociology

Dieterich, Oskar

College Entrance Exams In Education

Oskar DieterichDr. CalleroSenior Seminar III Researchers have expended much effort studying college entrance exams and whether they are successful in showing the potential of students in higher education. This study examines student's attitudes toward college entrance exams and whether exam results affect self-perceptions. My research

consisted of surveying 103 students at Western Oregon University, while also conducting ten in-depth interviews. The data show that the majority of student's believe that college entrance exams do not predict success in college, are not a good representation of their academic knowledge, and most students believe their college entrance exam score changed how they see themselves. These results suggest that college entrance exams have negative, unintended consequences for students.
Mentor(s): Callero, Peter

Jacobs, Katrina

Gender Inequality in College Classrooms

This analysis examines the patterns and probability that Gender Inequality is in Western Oregon University classrooms. This research was conducted in order to find what is the level of Gender Inequality at the College Level and to understand the verbal and non-verbal signs of Gender Inequality. This research was conducted by interviewing 14 professors and handing out 109 surveys to students at Western Oregon University. What the research suggests is that Gender Inequality is not a significant issue at Western Oregon University. What is significant is that the students that have witnessed and experienced Gender Inequality in the classroom have experienced in the exact same way previous studies have showed.
Mentor(s): Dolan, Maureen

Yamashita, Chavon

Hawai'i Culture

What are positive and negative impacts of race and ethnicity for college students from Hawai'i? This research analyzes the attitudes and perspectives of students from Hawai'i who move to the "mainland" where the Hawaiian-culture is not a central value. Focus group interviews with 20 students from Hawai'i were conducted. Uniquely positive characteristics in Hawai'i culture included identity classifications, the pidgin-language, and identity humor. Students also identified negative factors associated with their views of haole and racism. Identity-fastening in Oregon affected identity-unfastening going back to Hawai'i. The results confirm that students' racial and ethnic identity raises self-

awareness in Oregon, as Hawaiian cultural values are left in Hawai'i.

Mentor(s): Callero, Peter

Ciraulo, Matthew

Influence of Technology in Family Meals

This study analyses the influence that technology has on family meals, and whether the inclusion of devices is creating barriers in family communication or creating an environment that fosters communication for the family of the 21st century. One hundred ninety-seven students at Western Oregon University were surveyed to determine the percentage of students who used technology, how frequently, and what devices were being used during family mealtimes.With the combination of family interviews of parents from three different family structures, it can be determined how technology is being used and whether it is as detrimental as previous reports suggest. After the collection of information from our sample population, people are using technology with the most favored devices being television. When interviewing families, we see a trend in the use of television at meal times. However, families report using the TV as background noise to ease social anxiety or use it as a bonding experience as an activity the entire family can enjoy creating an environment that creates conversation.

Mentor(s): Dolan, Maureen

Shrode, Calla

Influence on Dietary Habits in Children: Corvallis Farm to School

Much research has been done on the eating behaviors of children. The growing epidemic of health issues within the United States is no longer something that just affects adults. Obesity, Type II Diabetes, and heart disease are affecting children as young as four years old. The influences on a child's diet are developed in the family structure and proper education in nutritional areas like school systems. Interviews conducted at Corvallis, Oregon schools indicate that people are trying to help with the long term dietary habits of children. Programs that deal with the dietary habits of children do not receive adequate funding and could use a lot more community support. The process of the Farm to School program should be thoroughly reviewed so that

other school districts can have a clear understanding of the benefits for all parties involved, and if they choose to utilize a similar program, they are aware of what problems may arise for them.
Mentor(s): Braa, Dean

Miller, Morgan

Modern Communication Technology and Community Organizing

This research was conducted in order to understand how the use of modern communication technology (MCT) influences the dynamics of community organizing. In-depth interviews with leaders from a diverse set of activist community organizations were conducted. Questions focused on organizing dynamics, member participation, and the mobilization of action. Analyses revealed the benefits and limitations of utilizing MCT's. In addition, effective community organizing using MCTs was found to vary with the demographics of the organization.
Mentor(s): Braa, Dean

Vigil, Libby

Multiethnic Dating Patterns of College Students: Experiences, Attitudes, Preferences, and Prevalence

Qualitative survey data and quantitative interview data were collected on multiethnic relationships of college students. 186 college students were surveyed and 12 people were interviewed (5 couples and 2 individuals). Results find that mixed and non-White only individuals identify much stronger with their ethnicity than do White-only or single race/ethnicity individuals. Those of all ethnic identities report having support from friends in the event that they were dating someone of a different identity as themselves. It is the immediate families of underrepresented individuals that tend to express disapproval of mixed relationships while the extended families of White individuals who do so. Relationship conflicts include differences in cultural upbringings, misunderstandings of their partner's perspective, and issues regarding family. Findings about relationship benefits include an appreciation for and desire to learn and practice their partner's culture; and a change in perspective in relation to how they view their

partner's culture/ethnicity, and the reality of what it means for their partner to identify
with that culture/ethnicity.
Mentor(s): Dolan, Maureen

Kelley, Madison

Perceptions of Oregon Child Welfare Workers

This qualitative study explores patterns of the working conditions faced by Oregon child
welfare workers. A recent federal audit displayed that caseworkers are overworked,
underpaid, and harrassed which contributes to a lack of proficiency in providing
adequate care to children and families. The research aims to understand the forces and
factors that lead to an unsuitable system and strives to provide suggestions for
improvement. By interviewing child welfare workers and establishing patterns based on
their responses, several categories are created that explain the inadequacies of the
child welfare system. The results confirm the claims from the audit and suggests that
the child welfare system should be examined and improved. Caseworkers share views
of unmanageable workloads, insufficient resources, and a lack of support from
management. Funding implemented as a response to the audit has not made a positive
change in working conditions and a high burnout rate persists. Because the audit did
not spark much public outrage, caseworkers wonder what it will take for child welfare to
be reformed. The discussion of the findings includes suggestions from the caseworkers
as well as the author on solutions for repairing the Oregon child welfare system.
Mentor(s): Callero, Peter

Archambault, Malcom

Play Culture Over Five Decades

Over the past five decades, there have been significant cultural changes in ideologies,
family structures, and institutions. In particular, there have been enormous strides in the
development of technology, electronics, and digital applications (i.e., social media, video
games, TV, smartphones, texting, etc.). Another substantial change over the past five
decades has been increasing mental and physical health issues within youth (i.e.,
stress/anxiety, obesity, depression, ADHD, social isolation, etc.). Most studies at this

point view these cultural, mental, and physical changes as mostly isolated and segregated issues with having little to no interconnected relationships. Through compiling twenty-three research articles, this research paper aims to show that these cultural, mental, and physical changes are interconnected and that over the past five decades there has been a substantial societal change in how youth engage in play. Both qualitative and quantitative methods were used to collect data from sixty-one parents within the state of Oregon to find if youth are indeed following this trend. The results of the study show that there has been a change in play culture. These changes of play culture include declining unstructured outdoor play time, increasing indoor play time, growing electronic use, and diminishing parental views of safety and trust outside of the home. Additionally, the data shows that stress/anxiety, obesity, and social isolation are strongly correlated to these changes in play culture. It is hoped that this research brings awareness to these cultural changes and aids in implementing policies to educate parents, institutions, and youth on the importance of spending less time on electronics and bring back unstructured outdoor free play.

Mentor(s): Dolan, Maureen

Lyons, april

Political Ideology and Voting

There has been considerable research on the rationale and ramification of political ideology andhow voting is affected. Researchers have investigated the influence that rational choice theory,paranoia and punishment, morals, values, group identity, social norms and group conflict haveon political ideology. In this study I conducted in-depth interviews with a politically diversegroup of 12 adults living in Oregon's Willamette Valley. I find that a one-dimensional standardin understanding political ideology is insufficient. Most of my participants aligned with groupidentity yet did not all vote along party lines. In addition, the results from this study revealed ageneral dissatisfaction with the current political environment.

Mentor(s): Braa, Dean

Slaughter, Emmie

Research Presentation on Involvement with the Foster System

There is an overwhelming crisis in Oregon concerning the foster care system. An abundance of children being taken out of unsafe homes combined with a severe lack of foster placement homes are working together to create this dilemma in our state. My research sought to learn more about the motivations, challenges and experiences behind being involved with the system. To learn more about these things I conducted research which consisted of 8, personal, in depth interviews with adults who are heavily involved with the foster care system. I believed I would learn things from these interviews that large scale surveys and questionnaires haven't revealed. My eyes were opened to a lot of the flaws and failures of DHS, as well as being opened to the heart and passion of the many people working to better the system. I collected a number of practical ideas on how to fix broken pieces of the system in ways that would be effective and helpful to those involved. My findings offer a wealth of information from a resourceful perspective that seems to be underused; namely, the knowledge and experience of those directly involved.

Mentor(s): Braa, Dean

Harding, Bethany

Social Perceptions of Sexual Abuse by Gender

Sexual abuse is generally seen as a women's issue. This societal belief that women are the typical victims of sexual abuse is damaging to male victims. Male victims are less likely to disclosure that they have experienced sexual assault, less likely to receive help, and will suffer different issues than women due how being a victim contradicts views of masculinity. I've surveyed close to 250 students at Western Oregon University and Chemeketa Community College. I've found that though perceptions of sexual abuse have been changing, male victims are still believed to suffer less effects from the abuse and are often not viewed as being victims. One conclusion of the study is that male students are less likely to know male victims of sexual abuse, indicating how men are more hesitant to disclose the abuse. Another conclusion is that in cases in which a male abuses a female are more likely to be seen as criminal than females abusing males. A sexual abuse counselor that I interviewed reported that if sexual abuse weren't seen as

a women's issue, men may be more open, suffer less effects from the abuse, and willing receive help. Research indicates that resources for survivors of sexual assault were scarce and should be more available due to the high percentage of sexual abuse survivors, both male and female.

Mentor(s): Dolan, Maureen

Ramirez Manzo, Janie

The School to Prison Pipeline in the United States

This research paper examines the history and structure of the justice system; while comparing it to its impact on youth's life experiences. Over 200 surveys were collected nationally, they consisted of individual's youth experiences in while in high school. Community members with diverse professions were chosen for interviews, they consisted of Juvenile Case Workers/Advocates and university professionals. The data collected was used to better understand the school to prison pipeline from specifically the communities of Monmouth, Independence and Salem.

Mentor(s): Dolan, Maureen

Gonzalez, Michael

The Socialization of Political Consciousness

The purpose of this study is to explore how politics have become polarized in the United States. Much of the literature on political socialization has tended to stress the role of the family in forming an early political consciousness in children. This is a study of voter behavior with the focus on young student voters. The study examines the extent to which parental political ideas and attitudes are transmitted to young people. This study includes a survey of students at Western Oregon University. The researcher surveyed 110 students between the ages of 18-47, and completed multiple in depth interview with 10 students between the ages of 18-21. The goal of this study is to gain a better understanding of the role of parental political socialization. A second goal of this study is to identify other variables that affect voter behaviors which include social media, community, college and, peers. The provisional conclusions of this study includes: 1) parental influences are significant in the political socialization of students; 2) social

media polarizes political consciousness of students; 3) symbolic attitudes are significant in identifying with a political party.

Mentor(s): Braa, Dean

Benefiel, Alissa

Factors of Church Attendance

This study examines the factors that contribute to people continuing to stay committed to a religious institution. Previous research has shown that there are many factors from age, gender, family, social status, social capital, and generational differences that lead to the continued attendance. Peoples Church, in Salem Oregon, was analyzed using participant observation, thirteen interviews and 150 questionnaires, to get a better understanding of factors at one particular congregation. The analysis of the data showed the factors associated with commitment are age, gender, social identities, volunteer work, and social capital.

Mentor(s): Braa, Dean;Callero, Peter

Session: 1. The Seabeck Experience

Finch, Demeter;Goodrich, Kailee Rae

The Seabeck Experience

Two alumni (Demeter Finch & Kailee Goodrich) of the 2018 Seabeck Service Learning Trip will give a description of what they experienced and learned throughout their Spring term class and during the week long trip to the 40th Annual DeafBlind Retreat in Seabeck, WA. They will share how the trip has impacted their academics, personal lives, and their career goals using PTASL.

Mentor(s): Hall, CM

Session: 1. WOU Students' Study Abroad Opportunities and Experiences

Li, Honghui

An Introduction to Guangxi Normal University

Guangxi Normal University is a key comprehensive university in Guangxi, which founded in 1932 and is located in Guilin well known for its fascinating scenery. There are 1822 full-time teachers and over 35,000 students. Guangxi Normal University has 79 undergraduate programs, 101 master's degree programs, 11 doctoral degree programs covering 12 disciplinary categories. Many quality education platforms are provided such as 25 key laboratories and dozens of scholarship for students. Guangxi Normal University has set up collaborative relationship with nearly 200 universities and research institutes from 40 nations and regions.

Mentor(s): Gong, Xiaopeng

Zhou, Yanjun

Introduction of Programs in Guangxi College for Pre-School Education

I will introduce the different programs, divisions, as well as two education centers in the college.

Mentor(s): Gong, Xiaopeng

Session: A Redneck, a Goth, and a Transconservative Walk into a Mall: Non-Normative Visuals and Nonverbal Communication

Croy, Courtney

A Redneck, a Goth, and a Transconservative Walk into a Mall: Non-Normative Visuals and Nonverbal Communication

Nonverbal Communication is one of the most transactional forms of communication, meaningthat messages are continually sent and received and it plays a major role in our lives. Researchers have estimated that 2/3 of the meaning in human interactions comes fromnonverbal cues. Nonverbal communication is considered so powerful for nine reasons.Nonverbal communication is omnipresent, meaning it is in virtually every communication act.Nonverbal behaviors are multifunctional in that they serve and are part of almost everycommunication purpose you can imagine. Nonverbal behaviors, to some extent, are part of auniversal language that are used and recognized across cultures. Nonverbal communicationcan create misunderstandings or enhance

understanding. Nonverbal communication predateslanguage when we examine the evolution of human communication. Nonverbal communicationis our first communication system. Nonverbal communication usually occurs before humansactually say anything. Nonverbal communication can express what verbal communicationcannot…or should not. And finally, we tend trust nonverbal communication.Nonverbal communication is made up of codes or signals. Kinesics, vocalics, artifacts, olfactics,haptics, proxemics, and chronemics. Kinesics refers to movement, vocalics refers to vocalactivity (tone, pitch, accent to name a few), artifacts refers to physical appearance, andadornments). Olfactics is fragrances and body odors. Haptics refers to touch and proxemicsrefers to use of space and distance. Finally, chronemics involves time.The presentations you will hear today are based on the assignment from my COM 331Nonverbal Communication class. The class works in pairs, with one student being the observerand the other student being the actor. The actor takes on some type of non-normative visual.Sometimes it is a medical mask, or a facial scar, or being in a wheelchair, or any approved non-normative visual. The non-normative portion is to duplicate something visual that we seerarely. This is done so that the pair of students can identify the nonverbal reaction, connect itwith the correct nonverbal code, analyze the interaction in which the code occurred, andultimately, conjecture how this did or could affect the communication process. The pairs spendfour hours in a highly population area, write an individual journal about what they saw, andthen come together to write a paper based on their analyses. Our Observers for Courtney andNicholas could not be here, but we are thrilled that Courtney and Nicholas are here today onbehalf of their project. These are their stories:

Mentor(s): Baldwin, Paula

Marlas, Nicholas Marlas

Non-Verbal Communication

Nonverbal Communication is one of the most transactional forms of communication, meaningthat messages are continually sent and received and it plays a major role in our lives. Researchers have estimated that 2/3 of the meaning in human interactions comes fromnonverbal cues. Nonverbal communication is considered so powerful for nine

reasons.Nonverbal communication is omnipresent, meaning it is in virtually every communication act.Nonverbal behaviors are multifunctional in that they serve and are part of almost everycommunication purpose you can imagine. Nonverbal behaviors, to some extent, are part of auniversal language that are used and recognized across cultures. Nonverbal communicationcan create misunderstandings or enhance understanding. Nonverbal communication predateslanguage when we examine the evolution of human communication. Nonverbal communicationis our first communication system. Nonverbal communication usually occurs before humansactually say anything. Nonverbal communication can express what verbal communicationcannot…or should not. And finally, we tend trust nonverbal communication.Nonverbal communication is made up of codes or signals. Kinesics, vocalics, artifacts, olfactics,haptics, proxemics, and chronemics. Kinesics refers to movement, vocalics refers to vocalactivity (tone, pitch, accent to name a few), artifacts refers to physical appearance, andadornments). Olfactics is fragrances and body odors. Haptics refers to touch and proxemicsrefers to use of space and distance. Finally, chronemics involves time.The presentations you will hear today are based on the assignment from my COM 331Nonverbal Communication class. The class works in pairs, with one student being the observerand the other student being the actor. The actor takes on some type of non-normative visual.Sometimes it is a medical mask, or a facial scar, or being in a wheelchair, or any approved non-normative visual. The non-normative portion is to duplicate something visual that we seerarely. This is done so that the pair of students can identify the nonverbal reaction, connect itwith the correct nonverbal code, analyze the interaction in which the code occurred, andultimately, conjecture how this did or could affect the communication process. The pairs spendfour hours in a highly population area, write an individual journal about what they saw, andthen come together to write a paper based on their analyses. Our Observers for Courtney andNicholas could not be here, but we are thrilled that Courtney and Nicholas are here today onbehalf of their project. These are their stories

Mentor(s): Schowalter, Dana

Marlas, Nicholas Marlas

Our Transconservative

Nonverbal Communication is one of the most transactional forms of communication, meaning that messages are continually sent and received and it plays a major role in our lives. Nonverbal communication is made up of codes or signals. Kinesics, vocalics, artifacts, olfactics, haptics, proxemics, and chronemics. Kinesics refers to movement, vocalics refers to vocal activity (tone, pitch, accent to name a few), artifacts refers to physical appearance, and adornments). Olfactics is fragrances and body odors. Haptics refers to touch and proxemics refers to use of space and distance. Finally, chronemics involves time. These presentations are based on the assignment from COM 331, Nonverbal Communication. The students work in pairs, with one student being the observer and the other student being the actor. The actor takes on some type of non-normative visual. Sometimes it is a medical mask, or a facial scar, or being in a wheelchair, or any approved non-normative visual. The non-normative portion is to duplicate something visual that we see rarely. This is done so that the pair of students can identify the nonverbal reaction, connect it with the correct nonverbal code, analyze the interaction in which the code occurred, and ultimately, conjecture how this did or could affect the communication process. The pairs spend four hours in a highly population area, write an individual journal about what they saw, and then use that data to write a paper based on their analysis. Tommy Ridgway was the actor, the Redneck, and Kyle Wells was his observer. Courtney Croy is presenting for her pair and she was the actor, the Goth. Nicholas Marlas, the Transconservative, was the actor and is presenting for his pair.
Mentor(s): Schowalter, Dana;Baldwin, Paula

Wells, Kyle;Ridgway, Tommy
A Redneck, a Goth, and a Transconservative Walk into a Mall: Non-Normative Visuals and Nonverbal Communication
Nonverbal Communication is one of the most transactional forms of communication, meaning that messages are continually sent and received and it plays a major role in our lives. Researchers have estimated that 2/3 of the meaning in human interactions comes from nonverbal cues. Nonverbal communication is considered so powerful for

nine reasons. Nonverbal communication is omnipresent, meaning it is in virtually every communication act. Nonverbal behaviors are multifunctional in that they serve and are part of almost every communication purpose you can imagine. Nonverbal behaviors, to some extent, are part of a universal language that are used and recognized across cultures. Nonverbal communication can create misunderstandings or enhance understanding. Nonverbal communication predates language when we examine the evolution of human communication. Nonverbal communication is our first communication system. Nonverbal communication usually occurs before humans actually say anything. Nonverbal communication can express what verbal communication cannot…or should not. And finally, we tend trust nonverbal communication. Nonverbal communication is made up of codes or signals. Kinesics, vocalics, artifacts, olfactics, haptics, proxemics, and chronemics. Kinesics refers to movement, vocalics refers to vocal activity (tone, pitch, accent to name a few), artifacts refers to physical appearance, and adornments). Olfactics is fragrances and body odors. Haptics refers to touch and proxemics refers to use of space and distance. Finally, chronemics involves time. The presentations you will hear today are based on the assignment from my COM 331 Nonverbal Communication class. The class works in pairs, with one student being the observer and the other student being the actor. The actor takes on some type of non-normative visual. Sometimes it is a medical mask, or a facial scar, or being in a wheelchair, or any approved non- normative visual. The non-normative portion is to duplicate something visual that we see rarely. This is done so that the pair of students can identify the nonverbal reaction, connect it with the correct nonverbal code, analyze the interaction in which the code occurred, and ultimately, conjecture how this did or could affect the communication process. The pairs spend four hours in a highly population area, write an individual journal about what they saw, and then come together to write a paper based on their analyses. Our Observers for Courtney and Nicholas could not be here, but we are thrilled that Courtney and Nicholas are here today on behalf of their project. These are their stories.

Mentor(s): Baldwin, Paula

Session: Addressing Feminists, Environmentalists, and Addicts: Top Papers in Contemporary Public Address

Juba, Kyle

A Sermon for the Modern Era: Bill McKibben's Prophetic Persona and Usage of The Locus of the Irreparable

In this Paper, I examine Bill McKibben's rhetorical persona and the usage of the locus of the irreparable and ecological jeremiad. Specifically, the focus of this paper is on McKibben's 2011 speech at the climate conference Powershift. As the Earth continues to undergo an environmental cataclysm, disrupting and threatening humanity and nature, McKibben enacts a prophetic persona that is characterized by hopeful cynicism. I argue that this constructed persona borrows heavily from the biblical prophets John and Jeremiah. Furthermore, in my analysis of McKibben's rhetoric, his speech – and writings – are deeply set in the concept of Cox's (1982) locus of the irreparable. Lastly, I investigate the model of the ecological jeremiad as another rhetorical concept that McKibben utilizes. The interplay between these rhetorical ideas makes McKibben an environmental rhetor who stands out as unique from older and contemporary green voices.

Mentor(s): Schowalter, Dana

Fausti, Nicholas

Addiction Redefined: The rhetorical significance of Johann Hari's speech "Everything You Know About Addiction is Wrong"

In this presentation, I analyze the rhetorical significance of Johann Hari's TEDx speech"Everything You Know About Addiction is Wrong." Hari uses an analysis of different evidencerelating to the roots and continuation of drug usage in our society to formulate an argument thatserves as a contrast to our current approach to drug addiction. Through this rhetoric, I believeHari is attempting to reframe how we perceive addicts, attempting to create a new social reality,which then alters how we approach drug addiction both socially and politically. His attempt toalter the way we think about addiction by challenging self-truths that we hold evident through atype of narrative fidelity. I believe the effectiveness of Hari's influence is enhanced by hisarticulate usage

of logos, vivacity and symbolic action. To this end, Hari's rhetoric leveragespublic and collective memory to insert an antithesis and a new claim of definition relating toaddiction.

Mentor(s): Schowalter, Dana

Angus, Nora

We Should All Be Feminists

In this paper I analyzed Chimamanda Ngozi Adichie, and her TED Talk based off her book, "We Should All be Feminists." Adichie is a Nigerian woman who has firsthand experience with feminist issues of inequality and serves as a speaker and activist for issues of feminism and beyond. She is a renowned author, activist, academic, and a feminist. In hearing of her personal experiences regarding inequality, I realized I am able to identify parallels between her experiences and the inequalities which I have faced despite our vastly different origin stories. The importance of her work as a feminist is emphasized in her rhetorical techniques, such as using personal narratives and public vocabulary to bring connection and a sense of equality to her audience. Adichie urges society to modify their actions in order to promote, normalize and reconstruct their ideas of feminism in a more positive light.

Mentor(s): Schowalter, Dana;Plec, Emily

Session: Anthropology Symposium

Nagle, Haliegh

Excavating a 19th Century Men's Boarding House in Santa Clara, California

In the summer of 2019, I will participate in the Silicon Valley Community Archaeology Project Field School in Santa Clara, California. The excavation site is a men's boarding house in use from the late 19th to early 20th centuries by single men who worked at the nearby Eberhard Tannery, which at the time was one of the largest tanneries in the world. The tannery operated from 1848-1953 and existed alongside the booming cattle ranching business, brought about when the Mexican government distributed land grants to prominent families throughout California. The Project aims to understand what daily

life was like for these men. I expect to learn basic archaeological field and laboratory methods and develop an independent research project. My focus will be on the impact the rise of large-scale, industrialized agriculture had on the environment and people of central California.

Mentor(s): Smith, Robin;Weitzel, Misty

Ryals, Cameron

Peace Within the Baha'i 2019; Faith: Understanding Ideas In Action

This project seeks to understand peace as a concept, action and way of life within the Baha'i community in Salem Oregon. Baha'ism was founded in 1863 and spread across the world with its message of peace. The importance of the subject of peace within the Baha'i community not just as a concept, but as a way of existing and interacting in the world led me to my main research question: what does world peace look like to Baha'i and how do they plan to achieve it? Secondarily, what is the Baha'is relationship with other world religions, especially Abrahamic religions and how do they promote peace within the local community, more specifically with poor or disenfranchised people? The importance of the research lies in a better cross-cultural understanding of what peace is and how it operates.

Mentor(s): Miller, Katherine

Session: Art & Design Portfolio Presentations

Brown, Jessica

Art & Design Portfolio Presentation

Mentor(s): Bracy, Jennifer

Danforth, Nell

Art & Design Portfolio Presentation

Mentor(s): Bracy, Jennifer

Willoughby, Laura

ACADEMIC EXCELLENCE SHOWCASE

Art & Design Portfolio Presentation

Mentor(s): Bracy, Jennifer

Chilton, Hannah

Art & Design Portfolio Presentation

Mentor(s): Garrison, Jodie

Timmons, Cory

Art & Design Portfolio Presentation

Mentor(s): Bracy, Jennifer

Maratita, Sohaina

Art & Design Portfolio Presentation

Mentor(s): Bracy, Jennifer

Wang, Fan

Art & Design Portfolio Presentation

Mentor(s): Garrison, Jodie

Garcia, Jocelyn

Art & Design Portfolio Presentation

Mentor(s): Garrison, Jodie

Riff, Sabrina

Art and Design Portfolio Presentation

Mentor(s): Garrison, Jodie

Session: Chemistry Capstone Seminars

Shinsato, Haylie

Antibacterial Properties of Hydroxamic Acids

Hydroxamic acids and their derivatives are organic functional groups that are analogs of carboxylic acids. The amide and hydroxyl moiety of the groups are extremely useful in the synthesis of many drugs, including those containing antibacterial properties. This presentation will cover why and how hydroxamic acids and their derivatives are important within the synthesis of antibacterial drugs, as well as research conducted on a modified procedure to synthesize hydroxamic acids within an undergraduate laboratory setting.

Mentor(s): Courtney, Arlene

Alexander, Jessica

Bad Blood: A Crime Scene Investigator's Nightmare

Blood… it flows through the veins of every living person. Blood has the function of transporting oxygen throughout the body, however, for certain individuals, there is one more important role. Crime scene investigators use blood to unravel puzzling mysteries of crime scenes. This presentation will explain how blood is analyzed, the varying types of blood spatter evidence and different chemical tests that can be used to find trace elements of blood.

Mentor(s): Courtney, Arlene

Wanderschied, Nicholas

Biochemical action of tetanus toxin at the synaptic terminal.

Tetanus toxin, one of the most deadly compounds known to man, is produced by a bacterial species in anaerobic environments. If released inside a human, the toxin will be shuttled by motor proteins to the synaptic terminal between an inhibitory interneuron and a motor neuron. It will then enter the axon of the interneuron and cleave necessary proteins. The action of this toxin may ultimately lead to spastic paralysis and possibly death. This presentation will outline how each of these processes occur.

Mentor(s): Courtney, Arlene

Smith, Alec

Eliminating Mosquito-Borne Diseases with One Simple Ingredient

ACADEMIC EXCELLENCE SHOWCASE

Imagine a world where millions of lives could be saved; with global climate change becoming an issue, increasing amounts of groundwater are becoming available, contributing to a higher number of mosquitoes. Eliminating mosquito populations will eliminate diseases such as Zika Virus, and Malaria which affect over 700 million people on this planet. The purpose of this presentation is to inform the general public about the environmental effects on mosquitoes, ways to control mosquito population, and the environmental effects of insecticides.

Mentor(s): Courtney, Arlene

Azorr, Alexandria

Opioids: A Class of Drugs too Powerful to Ignore

Opioids are extremely addictive drugs that have a long history of overdose and abuse. The shocking statistics show a vital need for change in our society. In this presentation, several aspects of opioids will be examined, including general characteristics and important biochemical information, such as the main mechanisms of action and effects of short-term and long-term use. In addition, the opioid epidemic will be explained to express the dangers of using opioids too freely, along with strategies to combat these dangers. This will include pharmacological treatment and several prevention methods that are currently being used and have proven to save many lives.

Mentor(s): Courtney, Arlene

Austin, Rachelle

Stannates: The Creation of Tin Oxide Semiconductors and their Applications as Photocatalysts

This presentation details the formation of tin oxide semiconductors and their mechanisms for treatment of organic pollutants such as organic dyes via light-activation. Information on semiconductors spanning from the quantum level up through synthesis and practical applications is included in this report along with a summary of previous research regarding semiconductor use for toxic waste treatment. The second portion of this presentation describes the methods used in the WOU Chemistry Research Lab to synthesize tin oxide semiconductors and test their ability to degrade organic dyes via

UV-light activation.

Mentor(s): Courtney, Arlene

Baron, Adam

The Importance of Water Quality Assessment in Our Changing Climate.

Global climate change is a prominent environmental concern, and most of the public focus has gone to finding viable renewable energy sources and reducing atmospheric carbon dioxide. In many ways, global climate change and human activities are affecting bodies of water around the world. It is crucial to our survival to identify these problems, including those from climate change, and properly address them to ensure a sufficient supply of clean water and food from aquatic and marine sources. This presentation covers the use of water quality assessment to identify environmental problems on both a global and local scale, showing the effects on ecosystems and our supply of clean drinking water and explores remediation options that are worth considering.

Mentor(s): Baron, Adam

Uri, Brandon

The Powers of Medicinal Cannabis; THC and CBD Explained

Cannabis has been used for thousands of years, not just to obtain a euphoric feeling, but for medicinal purposes too. This presentation covers the rapidly growing industry of cannabis as a medicinal and recreational drug. Additionally, it will explain how to obtain a high purity such as tetrahydrocannabinol (THC) and cannabidiol (CBD) components through instrumentation and how these components are used pharmaceutically, therapeutically, and the side effects thereof.

Mentor(s): Courtney, Arlene

Wright, D-Dre

Tissue Engineering: Rebuilding Aortic Layers

The aorta is the largest artery in the body, stems from the heart, and is vitally important for oxygen-rich blood delivery to the tissues. An aortic aneurysm can rupture a portion of the aortic wall and potentially lead to death. This presentation sets out to explore the

chemistry and biology behind a functioning aorta and apply these principles to building a tissue-engineered scaffold that can serve as a compatible substitute in the aortic wall.
Mentor(s): Courtney, Arlene

Winslow, Dakota

True Firepower: A Survey of Combustive Technologies

Combustion is foundational to much of chemistry, and a host of modern technologies. This presentation serves as an overview of various combustive technologies, including general information about fuels, oxidizers, and common combustion reactions, as well as individual studies of combustive systems such as wax candles, turbine engines, and black powder cannons.
Mentor(s): Courtney, Arlene

Session: Computer Science and Information Systems Capstone Projects

Ohnemus, Aidan;Korchagin, Tim;Roehrig, Ben

Books@WOU Online Book Exchange

Books@WOU is a tool that helps students buy, sell and exchange textbooks with each other without any overhead from organizations seeking to make a profit. Students can take books they no longer need, and post them on the site to offer to sell them. Those looking to buy books can browse posts from other students, or place an offer on the site to buy a specific book they're looking for in case someone happens to have one lying around. Users can browse the site for offers to buy and sell books, and get in contact with students to meet on campus or at some other safe location. Books can be searched by title, and results for browsing and searching can be filtered by author, year, subject, and other attributes. The tool can also be used by non-students or former students who want to offer their books, even those from other schools. Only some books can be rented from the book store, and while you can buy others and sell them back to the university's book store, you have more control over the money you get back and what you're willing to pay for a book with our website.
Mentor(s): Beers, Ted

Boyer, Khorben;Ashenbrenner, Stuart;Groshong, Dominic;Vance, Brock
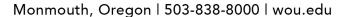
Dialogistic

Dialogistic's purpose is to serve as a data management system that will provide volunteer fundraisers at a phone-a-thon, or operators at a call center, donor data organization and scheduling, along with assistance in the managing of a phone-a-thon. This includes, but is not limited to, displaying information on past and potential future Constituents. In addition, it will allow volunteer fundraisers or operators to be assigned Constituents to call and allow them to submit changes to data records, which will be reviewed and approved or denied by an administrator on a case-by-case basis. The project was created to potentially replace the college's manual Google Document process for handling this information and call assignment. Our product will allow for algorithmically assigning calls to volunteers based on call and Constituent history, with manual assignment as an option.

Mentor(s): Morse, Scot;Morgan, Becka

Rule, Katelyn;Hammett, Jerika;Li, Runnan;Chen, Yumin

Fishhawk Lake Water Website

In this capstone project, we see the culmination of the knowledge and experience that the members of SpockMonkeys has to offer. Inspired by the Fishhawk Lake water treatment plant, the SpockMonkeys have specifically created a webpage to fit the needs of the small-time rural water treatment plant. The website's main feature is a display of real data feeds so that the workers there can view the status of the plant while they go about their other duties. It displays PSI, chlorine, raw water turbidity, and estimated tank level. This site also alerts workers when the feeds pass their thresholds; alerting through emails, texts, or phone calls. The Fishhawk Lake website is made with a combination of C#, Javacript, Linq, Html, SQL, CSS, Bootstrap, ASP.NET MVC API, with API utilization of Particle, Adafruit, IFTTT, OpenWeatherMap, and various Google API's. This website was developed using Agile principles, implemented through Disciplined Agile Delivery (Scrum), and a level of teamwork that the individuals of SpockMonkeys had not experienced before this.

Mentor(s): Morgan, Becka;Morse, Scot

Allen, Forrest;Stewart, Cody;Hui, Ruoyu;Cheng, Xinrui

Garden Management Systems

Mentor(s): Beers, Ted

Grassman, Jacob;Fullerton, Grant;Kedir, Multezem

PaintBox

PaintBox is an application created for hobbyists and enthusiasts that assists in keeping track and organizing of miniature painting projects.

Mentor(s): Beers, Ted

Leonard, Nicholas;Bishop, Alex;Woods, Jace;Li, Chi

Powerlevel

For people who want to get in shape or work out, the RPG-like web application Powerlevel, is a workout planning platform that integrates RPG elements into a workout setting. Powerlevel hosts several workout plans and workouts that users can follow or mix as they wish, while providing a gamified interface and spin to all fitness activities that resemble a role playing game. Fight monsters and complete dungeons by following your workout plan and earn loot and experience to level your character. We wanted to provide something that could provide some encouragement to complete difficult fitness goals. Powerlevel is the result of our vision to provide a fun way to motivate yourself to keep yourself physically healthy and fit as well as appeal to our more, fantastical and gaming escapisms.

Mentor(s): Morgan, Becka;Morse, Scot

Coe, Gregory;Stepanenko, Joseph;Li, Jiading

Projects Made Easy

The goal of our project is to create an interactive web app that helps to track and update projects. Our user's project information is trackable in the cloud and incorporates a database and web page to track objectives, both pending and completed, as well as a

changelog. The homepage we create allows users to visit and learn more about the project management services that we offer. After considering our services, the user's register an account with their email address.Users are linked to their web-based user account from which they can access their storage space and projects as well as being emailed a link. Inside the actual tracker, we provide either a single template, multiple templates or a dynamic, customizable template for users (depending on project time constraints). After selecting the template, the state of the project is stored in a unique database on the server for later access. These databases and the front-facing project management web app will be able to be shared in the form of URL.
Mentor(s): Beers, Ted

Versoza, Michael;Coe, Gregory;Korchagin, Tim

Put Food In Your MonMouth

Our project is a online aggregator of information about local food options for Western Oregon University students and Monmouth citizens. Information from where establishments are located to what they offer and customer reviews. This project aims to be a link between the eatery websites and owners and the people who will utilize them.This system allows for the following:A centralized location of information about eateriesUsers can view maps, reviews, descriptions of carts and contact information of the locationsUsers can view prices, descriptions of food and pictures of the foodFood cart owners can update information about their locations, deals and specialsUsers can access the information from a home or mobileEventual upscale to City of Monmouth and Western Oregon University community pagesThis project aims to provide a directory for all the information on the food carts in Monmouth, Oregon. Information about what food carts are currently operating in town, where they are and what they offer. Have you ever been to a restaurant and looked at an item on the menu and had no idea what it was and you were afraid to ask? That's one of the goals of this project, breaking down the menu with detailed information about each offering, complemented with photographs and customer reviews. The website will also provide pricing information, hours and contact info for each of the locations.The food carts will benefit from what amounts to free advertising and will have the ability to submit new information

for updates on our page. There will be opportunities for them to list specials and deals/coupons. Our page will provide links to their existing social media and websites as well. When new food carts come in they will be able to submit a request to be added if they choose.The project has room to scale into more interaction with the food carts and eventually the City of Monmouth and Western Oregon University. We aim to make this website work well on desktop computers and mobile phones as well. Given enough resources and time this project will become a dynamic website that is self populating. With even more time the hope is to expand to cover local restaurants as well.
Mentor(s): Beers, Ted

Fry, Stacia;Acosta-Cervantes, Hector;Jansen, Tiffany;Vickers, Adrian

ReadyGO Travel

Design and Construction of an Easy to Utilize Travel Website that Focuses on Addressing Budget Concerns and Providing Suggested Travel Location OptionsMany people love the idea of travelling, but don't always know if they have the budget to do so. During our research in preparing for this project we found that many websites provide travel and booking options, but don't usually focus on providing total estimated costs for budgeting. Additionally, travel information in general can be overwhelming as a user books each travel component. Costs can add up quickly and can make them feel that there may be no end in sight. Our solution to this is to be an intermediary. To provide a quick hub of budget information for those whom need assistance determining where they can afford to travel. Our site allows users to find an estimate of how much it would cost to travel to a specific country and/or popular destination. Our focal point starts with flight and lodging information as well as providing info ranging from food, to weather, to crime, and many others. With this new information easily at hand, we then provide links to actual booking sites. Our customers can set up user accounts to save searches, compare locations, reference previous location costs, share results on social media, and even save their favorite destination opportunities. This product is intended to provide potential travelers with much needed tools to use during their initial vacation planning stages. Our goal is to deliver quick hit information that will make traveling more feasible to our users as they consider their next adventure!

Mentor(s): Morgan, Becka;Morse, Scot

Pan, Kexin;Wakita, Shion;Conner, Shayna;Bergman, Austin

Rec Nexus Project

For active individuals, who would like to utilize the facilities and engage in activities with other individuals, Rec Nexus is a web application that reintroduces the sense of community and open doors for available space. The application will help users form sports groups through common interest, and at the same time obtain information on the facilities. The website will allow users to easily create, modify, and delete the games that they've created, and also invite other users to their game. With the chat feature, users are able to communicate effectively on the status of the games with other users. Venue owners have control over the game scheduling at their venue, and can monitor which games are scheduled for certain date and times. Unlike other sport grouping applications, our product will also feature the information on facilities in the region including rating and availability.

Mentor(s): Morgan, Becka;Morse, Scot

Davis, Launia;Martinez, Joshua;Jones, Schaefer;Greenley, Autumn

The Student Scheduler - Yellow Umbrella Corp

Though scheduling in college is vital, tools provided to help students determine their schedules are often lacking. The Student Scheduler is a project that aims to synthesize a students needs along with what they've already completed and help students determine which classes to take in future terms.The Student Scheduler also allows for users to enter in non-scholastic schedule items when deciding which classes to take, allowing for more flexibility and utility in the schedules. To research this concept we looked at existing competing software like DegreeWorks and considered where they fell short for most students, then planned on ways to improve those problems.Overall, we aimed to simplify the process of choosing which classes to register for as a student in order to minimize inefficient class selection and to hopefully enhance the experience so as to be less stressful for the user.

Mentor(s): Morgan, Becka;Morse, Scot

ACADEMIC EXCELLENCE SHOWCASE

Versoza, Michael;Gee, Stuart;Kunz, David

The Wolves Den Food Pantry

Our project is a system that bridges the communication gap between the food pantry coordinator, volunteers, and food donors for the Western Oregon University (WOU) food pantry operations that serves those at WOU and in the local community.This system allows for the following:Volunteers can communicate their availability to work at the food pantryCoordinators' ability to modify and finalize volunteer workforce scheduleCommunicate weekly food pantry workforce schedulingPeople to sign up to be volunteersDonors can communicate when they have food and supplies to be dropped offAbility to track key data and generating reports presented to the board and donors
Mentor(s): Beers, Ted

Larios, Manuel;Stokes, Mason;Ki, Nikki

URent - A Peer-To-Peer Rental Website

For people who like to make a little money on the side or rent rather than purchase, this sharing economy rental website is a host for all kinds of peer to peer transactions. This rental website will be easy to find local items that you are interested in and even create a competitive market for affordable transactions. Unlike other rental websites, our website will have distinguishing features that are extremely user friendly making it an enjoyable experience rather than a stressful one. Throughout the process of creating this website we discovered the want for more peer to peer marketplaces, because the sharing economy is on an upward trend. People like to rent items instead of buying them, or rent their property out to make a little extra money. The problem with this is that there are not any good places to do this on the Web. Not only have businesses taken over the rental marketplace, but it is also very flawed. Our hope is that URent satisfies this need and is versatile and robust to the various things it has the potential for.
Mentor(s): Morgan, Becka;Morse, Scot

Franco, Anthony;Visuano, Anthony;Dennis, Travis

Whiskey Tango Foxtrot

Whiskey Tango Foxtrot On average, more than twenty veterans across the country take their own life. Although veterans and active duty military members account for only seven percent of the US population, they account for more than fifteen percent of all suicides. A struggle for veterans is getting help, especially when it involves mental health. To assist veterans in finding the help they need quickly and easily, Whiskey Tango Foxtrot was created.Currently, our veterans use a system that lacks updating to newer technologies that could streamline the paperwork which is sent via US Postal Service (USPS) or by fax. Sometimes, this system takes too long for someone in need of immediate help. So, the government is encouraging developers to assist in the creation of sites to upgrade the system and streamline the way information is moved.Using application programming interfaces (API) developed for the VA, our site will allow visitors to search by city to locate facility information nearby. This information will include things such as the name of the facility, the address, phone number and website if available. This is just a small step towards making life easier for those that have sacrificed much, even if it's just time, for this nation.
Mentor(s): Morgan, Becka;Morse, Scot

Danchuk, Stephen;Wang, Yiming;Lomeli, Eric

WolfConnect.org

Our project creates an online platform where students can collaborate, connect with, and help tutor other students on their own time. Students are not restricted to just the classes they are taking, so students with similar majors can also help each other out if they have taken certain classes before and vice versa. The system also allows for students to connect with each other to find study buddies, and make listings to sell textbooks if they want to.The project is only for WOU students, so you need a valid wou.edu e-mail address to sign up. The system uses an open source software called Phpbb which is a bulletin board suite that can be modified to meet our needs and allows us to create our own add-ons and extensions to add features the base software lacks. Wolfconnect.org is something that we see as an extension of the WOU portal, where students can get tutoring and homework help when the on campus tutoring centres are

closed. Wolfconnect can definitely be a lot of things, but our focus is on Tutoring and homework help.

Mentor(s): Beers, Ted

Session: Contesting Cultural Formations: Top Papers in Media Criticism

Shrode, Calla

Cross Culture Ideologies for Class Stratification in Elite

How do humans, belonging to separate cultures, develop such similar ways of identifying what it means to belong to the upper and lower class in society? Media outlets are present in most cultures and even though media is often used for entertainment purposes, the signifiers within each entertainment piece impress certain ideologies without the viewer being aware of what they are trained to see. To demonstrate the use of hegemony, ideology, color symbolism and class conscious awareness, I use Marxist analysis and semiotics to explore how tragic framing and the rhetoric of tokenism are employed in the pilot episode of Elite, a serial show presented on Netflix. Using semiotic comparison of light versus dark colors, I discuss how they represent different classes so fluently that the viewer is unaware it is happening. The episode portrays to the viewer the ideology of 'us' versus 'them' when it comes to class division and it is seen throughout the episode, baiting the viewer to believe these two separate groups should be rivals. When one group mixes with the other, the viewer feels the need to resolve the intermingling of by allowing justice to be served to regain social balance. Although prejudice, violence, and drug use are evenly dispersed through both classes in the episode, only the elite are able to live without consequence. This further impresses the idea that upper class should only receive minor repercussions because of the important position they hold as idols for all of society.

Mentor(s): Schowalter, Dana

Retallack, Never

Highway to Masculinity

My essay is based off the analysis of Erik Kripke's television show Supernatural, in

which gender roles and relationships, archetypes, symbolism, and the inner psyche function to both promote and challenge hegemonic masculinity. To support my findings, including the complexity of gender roles, the effects of showcasing hegemonic masculinity, and what we learn from such depictions, I draw from several reliable sources. Supernatural presents a strong, bonded relationship between two heterosexual men, and I delve into the importance this representation plays, as well as the archetypes that the main characters portray. Since it is impossible for one man to be a perfect man, the brothers Sam and Dean represent the juxtaposition of complementary masculinities. Based on my findings I will argue that the show depicts the importance of a durable friendship, and the complicated workings of grief and trauma as well as how men are supposed to process these emotions. In doing so, it perhaps provides us with a helpful guideline.

Mentor(s): Schowalter, Dana

Daves, Sarah Daves

When the Truth Isn't Enough: Anti-Racist-White-Hero Framework, Tokenism, and Post-Racism

By applying Madison's "anti-racist-white-hero" (ARWH) framework developed in 1999, I seek to discuss how ambiguous, and yet, obvious views of race, racism, and success are threaded throughout the 2000 film Men of Honor, and so, create a false sense of post-racism, which includes a rhetoric of tokenism. Through the application of this framework, I am then able to conclude that the film does, in fact, "sustain systemic racism even though it appears to expose and condemn it" (McFarlane, p. 82). By taking an in-depth look at the film, I am able to expose the myth of white superiority and assert that post-racism and white heroism are at the crux of media as it applies to the film industry. I analyze the film against the backdrop of Tokenism, as explained by Bineham in his article, How the Blind Side Blinds Us, and find that the responsibility of failure is removed from the systems of power and privilege that are largely creating the obstacles in Navy Diver Carl Brashear's life in the first place, and positions that responsibility solely on Brashear himself. Through examining the facts of Carl Brashear's real-life events and comparing them to the larger than life events that Hollywood created, I

reframe the narrative of the film to find the ugly truth…racism sells.
Mentor(s): Schowalter, Dana

Session: Earth Science Senior Seminar Theme Session

Wegner, Austin

Forest Road Construction and Sediment Production in Western Oregon

Studies and observations of forest road systems in western Oregon have revealed that logging-related construction and maintenance contribute significantly to increased sediment transport within watershed networks. This increased sedimentation rate can have negative effects on the hydrology and ecosystem services of the channel network. Remediation of these negative effects is difficult, time consuming, and expensive, thus prevention is the optimal approach for many land managers. Through collection of experimental data and observations, it is possible to identify the most harmful practices associated with logging activities and eliminate or improve upon them, while encouraging further use of less harmful practices. The purpose of this presentation is to provide the scientific findings necessary to identify the impacts that forest road systems have on watershed sediment yield and the techniques employed to mitigate the effect.
Mentor(s): Taylor, Steve

Baldwin, Palmer

Hydrologic Response to Timber Harvest and Forest Management Practices in Western Oregon

Palmer Baldwin, "Hydrologic Response to Timber Harvest and Forest Management Practices in Western Oregon" The hydrologic balance of streams and riparian zones in the Western Cascades of Oregon, is part of a multifaceted geomorphic system characterized by forested mountain terrain. As part of an NSF-funded, Long Term Ecological Research Program, this region has been studied for several decades in order to better understand the effects of timber harvest and related land management practices on landscape processes. Current understanding and technologies allow for more accurate modelling of hydrologic response to forestry treatments, which regionally

impact ecological processes that can be linked to significant downstream response in watershed networks. Hillslope soil moisture, channel discharge, and stream temperature datasets collected over several decades are utilized in the development of regional response models, which are in turn critical for the development of sustainable land management practices into the future.

Mentor(s): Taylor, Steve

Collins, Hunter

Landslide and Debris Flow Occurrence in Forested Landscapes of Western Oregon

Research conducted throughout forested landscapes of western Oregon over the past 70 years has helped shape modern logging techniques, as well as land management policy. Timber harvest studies in the Western Cascades and Coast Range of Oregon provide evidence of increased mass movement occurrences in the time period after logging. Varying conditions of stand age, stage of regrowth, and environmental factors play a vital role in affecting soil stability throughout forested landscapes. Conditions created by anthropogenic impacts also account for large amounts of erosion and mass movement in this region, primarily associated with road construction. This presentation aims to explore research results derived from the work of multiple scientists over the past decades, and evaluate the direct impact of forest management on slope stability in the region.

Mentor(s): Taylor, Steve

Abel, Samantha

Perspectives on Climate Change and Forest Hydrology in the Oregon Cascades

Based on currently available data models, climate change is expected to impact forests and alter water balance in the Oregon Cascades over the next 100 years, and beyond. Various studies across the state have shown historic changes in precipitation modes (rain versus snow) and mean average temperatures, with resultant increase in snowmelt, retreat of snowpacks, and increased fire vulnerability. Decreases in basin-wide evapotranspiration rates, drier summers, and higher chances of winter-summer

floods are also predicted. Municipal and industrial sectors in western Oregon are projected to be vulnerable to drier summers and drought-related shortages, while the vulnerability of recreational sectors will be variable. Sustainable forest management practices such as reducing clear-cuts and allowing for increased canopy and vegetative cover may mitigate adverse effects on water availability in the ecosystem.
Mentor(s): Taylor, Steve

Hagen, Timothy

Sediment Dynamics and Erosion Response to Forest Management Practices in Western Oregon

Since extensive European settlement in the late 1800's, mountainous watersheds of western Oregon have experiencedincreased rates of sediment erosion stimulated by road construction, industrial timber harvest, and related forestmanagement practice. Understanding of the process-response implications of this land-use management historyinvolves long-term study of sediment-transport dynamics in mountainous headwater regions of the Western Cascadesand Coast Range. Research studies have focused on recording sediment flux by use of experimental watershedsinstrumented with sediment traps, weirs, and stream gauges. The data collected from these experiments provideinsight as to how sediment flux responds to varying forest management strategies. Commercial timber harvest is moreregulated today based on the results derived from watershed-scale experiments over the past 50 to 60 years. With anincreased understanding of sediment dynamics and historic erosion rates, policy managers can better prepare for futurestewardship of our forests and public lands.
Mentor(s): Taylor, Steve

Session: English Studies

Jasmin, Olivia

"Writer's Crucible": Creative Writing & Short Stories
Mentor(s): Soderlund, Lars;Hughes, Henry

Perez, Antonia

A Comparison of Politeness Strategies among Native and Non-Native English Speakers

Mentor(s): Troyer, Robert

Caldwell, Nicole

A Corpus Analysis of Color in British and American Gothic Literature

Mentor(s): Troyer, Robert

Caldwell, Nicole

A Selection of Poems

Mentor(s): Hughes, Henry

Benham, Heidi

How Do Readers Interpret Metaphors?

How do readers interpret metaphors? In this study, the interpretations of novel metaphors without context were compared with the interpretations of the same metaphors within a given context. Students were given a survey that consisted of two parts to be completed consecutively; the first part had three novel metaphors and the second part had the same three novel metaphors as well as the context of surrounding sentences. The students were to write what they believed each metaphor to mean on both parts of the survey. The results showed that metaphors without a context were interpreted differently than the same metaphor when in a context. In addition, there were certain interpretations that were prevalent for a given metaphor, even when no context was provided. The data show that the interpretations of metaphors can be affected by surrounding context and that there is a default interpretation for a novel metaphor related to the salience of traits in the blended cognitive space within which the items are compared.

Mentor(s): Hargreaves, David

Obendorf, Elizabeth

Materialist and Consumerist Anxieties in Washington Irving's "The Legend of Sleepy Hollow"

Washington Irving's "The Legend of Sleepy Hollow" is referenced in almost every form of modern entertainment, however most readers and viewers are unaware of the underlying anxieties Irving embedded in this entertaining tale. According to literary historian,Peter Betjemann, this short story reflects Washington Irving's conservative anxieties about the drastic changes taking place in early nineteenth-century New York. He argues that Irving, in fact, wrote the Headless Horseman as a sort of anti-materialist and anti-consumerist hero who kicks out Ichabod Crane, an English outsider. Crane threatens the plentiful Sleepy Hollow due to his insatiable need to consume its abundant resources, including, metaphorically, Katrina Van Tassel—he is a threat to the traditional, non-capitalist culture of the little Dutch community. Although there is much to admire in Irving's writing, we can see that he fell prey to conservative fears, favoring endogamy and hegemony. With the current anxieties surrounding immigration in the United States, reading "The Legend of Sleepy Hollow" through new critical eyes and recognizing Irving's prejudices, can prompt us to be more self-aware of our national fears and tendencies.
Mentor(s): Hughes, Henry

Angel, Ailyn
The Lexicon of Immigration in Presidential Speeches: Carter to Trump
Mentor(s): Troyer, Robert

Dean, Natalie
Writers Crucible
Mentor(s): Soderlund, Lars;Hughes, Henry

Kohnke, Nova
Writers Crucible
Mentor(s): Soderlund, Lars

ACADEMIC EXCELLENCE SHOWCASE

Kiernan-Sherrow, Sage

Writer's Crucible Presentation

Mentor(s): Hughes, Henry

Session: HEXS sponsored sessions

Heckard, Sawyer

A Critical Analysis of the Ergogenic Claims About Beta-Alanine.

Beta-alanine is a non-essential amino acid and can be taken up by muscle cells and combined with histidine to form a peptide, carnosine. Carnosine is a highly concentrated in muscle tissue and is a robust intracellular buffer. Carnosine is only 7% of the buffering capacity of skeletal muscle however, it can be doubled with beta-alanine supplementation. This presentation will outline the performance claims of beta-alanine, how beta-alanine can be consumed, the legality of the substance, and possible side effects or safety concerns. Beta-alanine claims to help athletes in the 60-240 second range. It is also claimed to decrease muscle fatigue and increase power for activities such as jumping or lifting weights. Many of the positive benefits of beta-alanine are claimed to come from beta-alanine acting as a Ph buffer as well as help remove metabolic byproducts. Throughout this presentation, I will review several research articles and analyze their results to give my opinion on if beta-alanine is an effective ergogenic aide.

Mentor(s): Kelly, Tom

Arklander, Hollie;Robles, Jalen

Careers In Therapeutic Exercise

Careers in Therapeutic Exercise By: Hollie Arklander Jalen Robles   In our EXS 230: Foundations of Exercise Science course, we participated in a group presentations. Our group presented on Chapter 13: Careers in Therapeutic Exercise from our textbook. The task was to summarize the chapter, talk about the different careers available in the field, and engage our fellow peers in a group activity about our chapter. For the different careers presented in class, we created handouts providing

information on education requirements, licensing agencies, salaries, national associations and current research done within these careers. Our activity was a direct application to one of the careers we had just presented on, Therapeutic Recreation Specialist. We asked our class to imagine they were older adults in their 80s and had just moved into a residential care facility. As group leaders, we were the therapeutic recreation specialists and lead groups activities for them to be engaged. These activities represented the daily challenges of the advance age population, for example hearing loss, visual impairment, and reduced mobility. After everyone participated on the different stations, we discussed how the challenges of the classmates completing the tasks and what as future Exercise Science professionals this activity made them aware of when working with this type of population. Reference: Hoffman, S.J., & Knudson, D. V. (2018). Introduction to kinesiology: Studying physical activity. Champaign, IL: Human Kinetics.

Mentor(s): Massa Gonzalez, Ada

Ayala Echeverria, Gisela

Designing a Self-Sufficiency and Food Literacy Program for Low-Income Adults: A Formative Evaluation

Designing a Self-Sufficiency and Food Literacy Program for Low-Income Adults: A Formative EvaluationGisela Ayala Echeverria, BS candidate; Megan Patton-Lopez, PhD, RDN AbstractBackground: Many low income and former homeless adults lack skills, knowledge, and confidence to meet basic daily needs such as cooking nutritious meals, budgeting, and time-management. Self-sufficiency programs have been developed to meet the needs of individuals who are transitioning into stable housing and employment. A local agency, Corvallis Housing First (CHF), will implement a program that aims to increase the number of residents taking action to help permanently break the cycle of homelessness.Methods: The CHF self-sufficiency program is based on Economic Mobility Pathways' (EMPath) Bridge to Self-Sufficiency. Residents will plan, reach, and sustain their personal goals in five essential areas: (1) family stability, (2) well-being, (3) education and training, (4) financial management, and (5) employment and career management. Classes will be held once a month to discuss and

demonstrate ways to build these essential areas. Specific topics include: financial management, time management, food safety, sanitation, cooking lessons, and food literacy. To assist the development of the program, a pre-survey was conducted to gain a better understanding of the knowledge, attitudes, and behaviors among the residents regarding their self-sufficiency, as well evaluate the need of the residents on each of the five essential areas. Forty-five questions were asked regarding their well-being, financial management, and family and friend stability.Results: The respondents (r=11, 25-67 years, 73% male), are aware of ways to improve their self-sufficiency. According to data, 82% can make meals with or without using a recipe. It is interesting that 63% have no interest in learning more about how to use food labels. However, 72% think about what they eat and how it impacts their health.Conclusion: Initial assessment of participants demonstrate that there is a need to support the residents' self-sufficiency. CHF Self-Sufficiency programming will provide hands-on instructional programming as well as case management to increase knowledge, support skill acquisition and promote positive behaviors, which will lead to an increase in self-sufficiency and well-being.
Mentor(s): Patton-Lopez, Megan

Cypert, Colton

Developing Strength and Muscle Hypertrophy in a College Student: A Systematic Approach with a Client

Exercise and proper nutrition both have the ability to drastically improve an individual's health,fitness and quality of life. This presentation discusses the methods and reasoning involved indesigning a training and nutrition regimen for a client whose goals are to build lean musclemass and increase their muscular strength. It will take an in-depth, systematic look at this challengingprocess from beginning to end. Including the steps involved in contacting and meeting withclients, developing their goals, measuring and evaluating baseline fitness statistics, analyzingnutritional intake, and developing an exercise and nutritional prescription.
Mentor(s): Kelly, Tom

Mickelson, April;Scheese, Crystal

Evaluation of Nurse Family Partnership

The Nurse Family Partnership (NFP) is a program dedicated to improving the lives of mothers and their babies by serving first time mothers living in poverty during the course of their pregnancy and the first two years of their child's life. The NFP matches mothers with nurses who provide guidance, mentorship, and work as a facilitator to meet the needs of the mother and child. The purpose of this evaluation is twofold. It will assess how the Nurse Family Partnership (NFP) meets the needs of its participants in Lane County and will determine what factors contribute to retention and attrition of participants. The proposed evaluation will evaluate participants' changes in behaviors and knowledge in the following areas: maternal health, parenting skills, child development, breastfeeding, and awareness of community resources for the families. A mixed methods approach to data collections is proposed to answer the evaluations questions. After completion of the program, mothers will complete a survey. These surveys will evaluate mothers' perceptions of how their knowledge, attitude, skills, and behaviors related to NFP goals changed throughout their participation in the program. To understand factors contributing to retention and attrition of participants a series of focus groups will be conducted. It is expected that the findings and recommendations of the proposed evaluation will be used to improve and strengthen the Lane County NFP program.

Mentor(s): Cancel-Tirado, Doris

Garcia Toche, Cristina

Food Literacy and Access to Healthy Food Needs Among College Students

Background: Food insecurity is a significant issue among college students that impacts mental health, physical well-being, as well as academic success. Past research illustrates that 20-60% of university students struggle to obtain healthy, adequate meals. While the underlying factors influencing food insecurity are complex, understanding the individual and institutional factors that contribute to food insecurity among college students will allow for the development of sustainable solutions. Purpose: The purpose of this study is to identify environmental, personal, and behavioral determinants contributing to food security, including food literacy and access to healthy food among

college students to inform strategic planning for programs, services and policies that at a 4-year regional university. Methods: Three focus groups with college students (n = 20) and an online student survey (n = 608) were completed in the winter and spring academic terms. The focus groups questions focused on coping strategies, food literacy, and food/ financial resources available on campus and in the community. The all campus online survey covered topics related to attitudes, beliefs and knowledge of food insecurity, food habits and financial resources available for tuition and food. Results: Several themes related to barriers to access healthy food, such as lack of knowledge on food preparation and shopping on a budget, as well as institutional practices that limit students access to adequate food for students with multiple time and financial constraints were discussed by the college students. Conclusion: The study's findings suggest that in addition to addressing deeper systemic issues such as college affordability, future efforts should focus on policy changes that increase access to food resource assistance. In addition, food literacy education programming and access to material resources for healthy food preparation would support students' purchasing and consumption of healthy foods that meet health and academic needs.
Mentor(s): Patton-Lopez, Megan

Seuser-Smith, Danielle
Gardening and Nutrition Education with School Age Youth: Case study with Boys and Girls Club of Salem, Marion and Polk Counties
Mentor(s): Patton-Lopez, Megan

Manzo, Ricardo
Increasing Cardiovascular Endurance and Weight Management in a College Student
A lack of education towards exercise is a big barrier to overcome when attempting to fight health-related concerns or even reach individual goals. The objective of this presentation is to explore the methods and reasoning behind creating a training schedule as well as discuss nutritional recommendations. It will also cover the steps and challenges that were faced throughout the process of working with a college

student as a client. The steps/challenges include contacting and meeting with clients, understanding their goals or motivation, measuring and evaluating baselines fitness statistics, analyzing nutritional intake, and developing an exercise and nutritional prescription.

Mentor(s): Kelly, Tom

Dodge, Justin

Team Wolf: Science and Sports

Mentor(s): Armstrong, William

Reinke, Danielle;Kauffman, Grant;Entagh, Setareh

The Nutrition Mission

The Nutrition Mission is a program to improve nutritional knowledge and healthy food access in high school students in order to set them up for present and future health through nutrition. With the rise of obesity among adolescents, nutrition education and access is more important than ever. This hypothetical 5-year nutrition program, created as a class project in HE 471, is aimed at improving nutrition in high school students to prevent and decrease obesity. The goals include implementing a food pantry, salad bar, and community garden to improve nutritional access, and cooking classes, a competition with various activities, and optional family involvement to improve nutritional knowledge and behavior change.
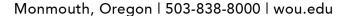
Mentor(s): Lilo, Emily

Session: Hypertext arcade

Poehlitz, Bryce

Drawings of a Thousand Cats

A collection of everyday narratives, intermingled with cat drawings and metaphoric slips. Drawings of a Thousand Cats consists of hand-drawn elements and as little text as possible. The drawings capture the essence of the moment or a thought that crosses us in our realms of imaginations or shy moments.

Mentor(s): Thakur, Garima

Willoughby, Laura

Like the Rain

'Like the rain' is a multi-pathed hyperlinked adventure that merges personal illustrations along with poetry and dialogue from the Japanese manga, BLEACH. The poetry and dialogue are disassembled and then juxtaposed from its original context and transformed into a conversation. There are four main paths to choose from, with later deviations further into the journey.

Mentor(s): Thakur, Garima

Timmons, Cory

Sleeping Beauty: Annotated

'Sleeping beauty' is a femme fairy's twist on an old classic. Explore the complicated nature of Grimm's Sleeping Beauty within a guided hypertext game, pierced through lens of trans-feminist critique. The work questions the effects of enforced gendered expectations and standards of behavior that linger in contemporary times, despite their archaic origins. How are we being damaged by this common form of media? Is it possible to inject social justice into these narratives?
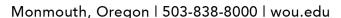
Mentor(s): Thakur, Garima

Maratita, Sohaina

Sovereignty

Sovereignty Sovereignty is an interactive hypertext game about growing up in a modern-day colony (the U.S. territory) and the experiences of indigenous people as "second class citizens" after WWII. This work features the poem of the same name by Joseph Borja, and and juxtaposes it with texts retrieved from various forms of media such as articles, peer reviewed journals and tourism websites.

Mentor(s): Thakur, Garima

Garcia, Jocelyn

ACADEMIC EXCELLENCE SHOWCASE

Where Are You?

'Where are you' is a story of two lovers, a family and the distance that keeps oscillating, changing the dimensions of time. This work is about a conversation that cannot be just heard but felt. It drives the viewer through a non-linear narrative that unravels the struggles, love and conversations and the pauses between them.

Mentor(s): Thakur, Garima

Session: Mathematics Capstone Presentations

Kelson, James;Yamada, Kalynn;Jones, Tyler

A Discrete Model to Aid the Crisis in Puerto Rico

Every year, the Consortium for Mathematics and its Applications (or COMAP) holds the Mathematical Contest in Modeling where participants are tasked to choose one of six types of problems based on a real-world scenario and construct a mathematical model within the four-day contest period. With none of us having ever modeled before, we thought it was the perfect challenge. As a group, we vigorously prepared and learned everything we could about mathematical modeling. When the time of the contest came, we were asked to create a disaster response system to aid Puerto Rico in their time of crisis after the terrible hurricane struck there in 2017. This disaster response system involved various tasks such as selecting a drone fleet, creating a drone schedule, and configuring and placing three cargo containers with necessary medical packages for local hospitals. See how our model successfully supplied the needed hospitals in Puerto Rico with medical relief for over a year.

Mentor(s): Nabity, Matthew

Farnell, Emily

Completing the Square and Squaring the Square

Completing the square is a method that can be used to solve quadratic equations by building a square with rectangular sections from the algebraic components. Using manipulatives with this method provides students a visual way to understand the mathematics as opposed to just plugging in to a formula. A related puzzle is squaring a

square, in which we take a square and we break it down into multiple squares of distinct areas. In my project, I put together interactive lessons to help students understand the foundations of these concepts.

Mentor(s): Cote, Ben

Hanefeld, Sophia

How Many Seats Can You Fit in a Soccer Stadium?

This presentation focuses on the creation and execution of a four-day lesson plan created for a high school geometry class. These lesson plans exemplify the pedagogy known as Project-Based Learning while incorporating concepts from soccer. I will discuss my experience developing these lesson plans and reflect on my experience teaching one of the lessons in a high school classroom.

Mentor(s): Merrill, Leanne

Piller, Kristen

Jordan Canonical and Isomorphism Relationships

The Jordan Canonical Form of a matrix is a significant theoretical tool in linear algebra but is not as useful in practice because it is difficult to compute. In graph theory, graphs are often represented using adjacency matrices.Isomorphisms between graphs are easy to understand but hard to compute. We explore the connection between the Jordan Form of adjacency matrices and isomorphisms and motivate further study.

Mentor(s): Nabity, Matthew

Roan, Morgan

Kicking It With Geometry

For my mathematics education capstone project, I have created a series of lesson plans that have incorporated certain aspects of my favorite sport, soccer. The main goal of my lesson is to have students work together and make a game plan to solve a complex problem involving geometry. This talk will dive into the importance of Project Based Learning as well as teamwork in a classroom.

Mentor(s): Merrill, Leanne

ACADEMIC EXCELLENCE SHOWCASE

Miller, Gregory

NBA MVP Predictor

The National Basketball Association's (NBA) most valuable player (MVP) award is a regular season award that is decided by a panel of sportswriters and broadcasters which varies from year to year throughout the United States and Canada. Each member of the voting panel casts a vote for first place to fifth place selections. The goal of this work is to create a model of an unbiased NBA MVP Predictor. We present our model and compare to other approaches.

Mentor(s): Nabity, Matthew

Manculich, Aubrey

Newton's Method and Chaotic Behavior

We explore the concept of chaos in mathematics. To do so, we use Newton's method to determine the roots of both real-valued nonlinear functions and complex-valued nonlinear functions. For complex valued function, we demonstrate chaotic behavior and connect to the idea of Newton Basin's and fractals. We present numerical results that motivate further analytic study.

Mentor(s): Nabity, Matthew

Harmon, Max

Paired Kidney Matchmaking Algorithm and Analysis

In this project, we present work towards an algorithm to assist the finding of cycles of patients and donors that are in need of kidneys and willing to donate respectively. We survey existing approaches, and introduce the tools, primarily graph theory, for developing and analyzing the algorithm as well as establishing assumptions that the algorithm operates under. We then outline our graph theory approach to developing the algorithm. followed by examining improvements and issues with said algorithm with potential solutions to said issues.

Mentor(s): Nabity, Matthew

Riley, Leslie

Patterns in Wythoff's Game of Nim

Wythoff's Game of Nim is a competitive game where players take turns moving towards a goal through a rectangular grid of points. An optimal play involves a specific set of points, d 밉 "critical points", that – when used properly – result in a win. My project delves into the patterns found in these critical points.

Mentor(s): Beaver, Cheryl

Cervantes Almonte, Yetzaveli

Using Circular Statistics to Investigate Changes in the Day of First Bloom

Climate change is a well-documented phenomenon with many tangible effects. One of the concerning results has been shifting phenological events. We apply circular statistical methods to investigate the observed day of first bloom of various species found along a mountain trail. We compare the mean day of first bloom between five different elevations and see how these differ through time. Our analysis of the data shows variation in the day of first bloom and motivates further analysis.

Mentor(s): Nabity, Matthew

Session: Model United Nations

Henderson, Holt;Stefansky, Matthew;Miller, Jacen;Holland, Amber;Amador Hernandez, Cristian;Rooper, Jenny;Dohrer, Maddie;Kasim Carew, Brittany;Peven, Andreas;Ped, Alex;Roe, Jared

Model United Nations Mock Session

This is a mock United Nations session with the following participants:Andreas Pevenalex ped Steven-Michael Richmond Jared Roe Cristian Amador Hernandez Jacen Miller Brittany Kasim Carew Mary Pettenger Matthew Stefansky Holt Henderson Amber Holland Jenny Rooper Maddie Dohrer

Mentor(s): Pettenger, Mary

Session: Music: Ethnomusicology and Graduate Research Projects

Fruit, Julia

Clara Schumann: Composer

Mentor(s): Baxter, Diane

Plada, Washington

Multicultural Music Composition

My experience as a South American composer During my two years as a composition student at Western Oregon University, I have explored my voice and style as a composer. What I discovered was that I had a foot in both my present and the past – as an immigrant, I was curious about the traditional music from my country, but as a composition student here in the US, I was also deeply interested in western traditional music. As part of an ethnomusicology project, I explored the question of whether other immigrant composers were also influenced by the music from their home country; I found that yes, other immigrants were also deeply influenced by their musical roots. At the same time as I was exploring my personal voice as a composer, I was also learning how to compose. My interests in South American music, specifically Tango, Milonga, and Candombe, led me to compose several pieces that incorporated elements from each of these musical traditions. In this short talk, I will share some of this music with the audience, as well as the compositional process behind this work. As I continue to develop as a composer, I am interested in growing even beyond my musical roots and blending elements of all genres of world music with western traditional music. In this growing global environment, I am interested in using the voice and vehicle of music to reflect the experience of mixing cultures and new blended societies.

Mentor(s): Baxter, Diane

Swatosh, Drew

Timbre and Accessibility in Choral Music

This presentation explores timbre in choral music and the accessibility of performance. Unlike instrumental music, choral music has language, so timbre is explored through the differences in language such as vowel shape. Timbre within choral music is also

examined by looking at examples of world music, avant garde classical music, aleatoric music, and music that combines western and non-western vocal techniques. The accessibility of each of these examples, the type of choir that the work is suitable for, and the role of timbre in programming music.

Mentor(s): Baxter, Diane

Session: Philosophy

Naylor, Jon

From Love to Hate: Restructuring Aristotelian Friendship

Aristotle's ideas on friendship are reconsidered in this presentation to account for other kinds of relationships and how they interact with each other. Instead of purely focusing on the positive, we examine negative kinds of interaction; presenting all of this in a new visual format based on Aristotle's original schema. This new critique of Aristotle seeks to recontextualize the many facets of human relation.

Mentor(s): Perlman, Mark

Martin, Jacob

Making Existentialism Compatible

Existentialists talk extensively about freedom, which would suggest that they are metaphysical libertarians. But are they? I argue that existentialists can be compatiblists, even though that brings with it less freedom.

Mentor(s): Perlman, Mark

Session: Presentations for Willamette Promise Guests Session in Pacific Room

Gallegos, Kodie

Attention Delay in the Presence of Visual Distractors

Humans encounter countless distractions in daily life. Such distractions disrupt selective attention and impede behavioral goals despite our best intentions, sometimes resulting

in serious consequences (e.g., distracted driving). A dominant theory of attentional selection proposes that perceptual grouping processes supporting object perception facilitate the rapid spread of attention across the entire object, not just individual features (Vecera & Behrman, 2001). Hence, when individual features of objects are to be selected (e.g., a key on a keyboard), distracting but irrelevant information causes more interference when it belongs to the same, compared to a different object (Kramer & Jacobson, 2001). The aim of this study is to evaluate the impact of visual distractors on attentional selection for targets that are either grouped (using illusory contours; Kanizsa, 1955) or ungrouped with irrelevant feature dimensions. Specifically, we used a modified Singleton task: participants searched for an odd shape in a display in which an irrelevant color distractor was present or absent. In this talk, I will discuss preliminary findings and implications regarding how distractions impact different levels of attentional processing.

Mentor(s): McCarthy, Dan

Kurz, Stephanie;Lau Hee, Courtney

Creative Behavior Survey: Validating a New Measure of Creativity

Existing psychometric measures of creativity have been generally limited to measuring divergent thinking as opposed to the entire creative processes and its associated behaviors. To address this limitation, we developed the Creative Behavior Survey (CBS) which assesses a range of creative behaviors including: 1) problem finding and formulation (anticipating problems; identifying problems where none are apparent; and structuring an ill-defined problem); 2) information gathering (gathering and reactivating relevant information); 3) ideation (engaging in cognitive processes such as insight; knowledge reorganization; and conceptual combination); and 4) evaluation (choosing/specifying evaluation criteria; forecasting/predicting the likely outcomes and consequences of implementing an idea; and appraising those outcomes or consequences of implementing an idea; and appraising those outcomes or consequences relative to key criteria). Data were collected from both fully-employed college graduates and current college students. Respondents completed the CBS and measures of creative potential, processes, and outcomes. The results showed evidence

of convergent and discriminant validity in both samples. Implications and future directions will be discussed.
Mentor(s): Foster, David;Murfin, Jessica

Frey, Emily;Grimsrud, Maxwell

Forced Connectivity: Environmental Choice and Potential Outcomes

Scholars have stated that being in nature positively influences psychological health. Recent empirical research documented this marked improvement in emotional and psychological functioning following exposure to natural environments. We examined the role of environmental choice on emotional responses to natural versus built environments. In essence, we addressed whether choosing or being assigned to a certain environment impacts how individuals respond to environments. Previous research is mixed, finding that choice improves emotional wellbeing via a heightened sense of autonomy and self-determination, but can also detract from well-being due to disappointment associated with a potential missed opportunity. Using a between-subject research design, participants were assigned to one of three conditions: 1) assigned natural environment 2) assigned built environment or 3) choice. Participants were exposed to simulated urban and natural environments. Emotional responses were measured using the Positive and Negative Affect Schedule, and the Connectedness with Nature Scale was used to determine whether participants' subjective sense of natural connectedness was impacted. Additionally, participants perception of the simulations aesthetic beauty was also measured. It was predicted that regardless of choice, participants would respond more positively and feel more connected to nature when exposed to natural environments. Initial preliminary results (N = 101) found that participants did indeed responded more positively to nature simulations that built environment simulations. Preliminary analyses indicate no significant difference between the assigned and choice condition and while research is still ongoing our discussion will focus on the implications of our current results.
Mentor(s): McMahan, Ethan

Haskett, Morgan

ACADEMIC EXCELLENCE SHOWCASE

How to Get Involved at WOU

The current presentation sought to inform Willamette Promise Students of the wide variety of opportunities Western Oregon University has to offer. More specifically, students will be made aware of (1) the experiences one can gain through the psychology major and (2) more broad experiences one can get involved with at WOU by taking advantage of the various clubs, organizations, and sport institutions.

Mentor(s): Cloud, Jaime

Puentes, Anakaren

Mundo y cultura, World and culture

Mentor(s): Marroquin, Jaime

Session: Video & Animation Shorts by Students of Art & Design

Megale, Laurel

A Teller's Beginning

This short was drawn in Adobe Photoshop CC, animated/video edited in Adobe After Effects and finally sound editing done in Adobe Premiere. Some of the themes of this video is independence, hardships and second chances. A Teller's Beginning gives insight to a young lad (Cyrus), and how he got introduced to the form of fortune telling by the mysterious Mama Booda.

Mentor(s): Tankersley, Daniel

Jensen, Alison

Agent Orange, Agent Orange part 2

Mentor(s): Tankersley, Daniel

Willoughby, Laura

Consume the Light, Encounter, Movement, Rhythmic, Hunted

Consume the Light:Created entirely in After Effects, this animation is an original narrative set to a song from composer Disasterpiece with the title Vignette: Visions. It

explores themes of beauty, isolation, and horror through movement harmonized with sound.Encounter:This animatic is an original narrative drawn in Illustrator, animated in After Effects, and arranged in Premiere. The animator was inspired by their own previous design work on a space travel poster series. It's main focus is to bring an alien environment to life and show what you might encounter should you visit.Movement:Movement is a non narrative film that uses original footage set to music composed by Chris Zabriskie. It's a study of both subject motion and camera motion as the film reflects on movement found in nature and unnatural man-made motion.Rhythmic:This film comprises of found footage edited to fit the song Do Something Rhythmic by the composer Pogo. The main goal of this film is to twist original, peaceful meaning into something completely opposite.Hunted: In this animatic, it shows an original narrative that was drawn in Photoshop, animated in After Effects, and arranged in Premiere. This particular story was inspired by the classic tale of Red Riding Hood, but creative direction was taken when it came to the entire narrative. Mentor(s): Tankersley, Daniel

Danforth, Nell
Gooey and MeMeMe
Mentor(s): Tankersley, Daniel

Davis, Launia
i is Clementine
Mentor(s): Tankersley, Daniel

Miller, Piper
Make Me Feel by Janelle Monae Rotoscope
Mentor(s): Tankersley, Daniel

Fuentes, Sarai
Mission 77, Channel Blues
Video and a short animation done in the science fiction genre and with the purpose of

demonstrating a set of aesthetics that combine well to entertainingly depict a unexpected and humorous narrative. They are meant to follow the idea of form following function, with a simple design and premise, but all the while giving off a meaningful illustration of a genre that people can poke fun at.
Mentor(s): Tankersley, Daniel

Zwart, Kevin
Music Cartoon
Mentor(s): Tankersley, Daniel

Sweet, Jenae
Nine, Repetition
Mentor(s): Tankersley, Daniel

Brown, Jessica
One Friend, Little, and Message 64
Mentor(s): Tankersley, Daniel

Maratita, Sohaina
Overthinker, Stake, Eyes Closed
OverthinkerOverthinker is a time-based piece about losing yourself inside your head and disconnecting from reality, essentially through the act of overthinking. The imagery of outer space echoes this theme, like you're screaming into the void, which is how it can feel like when we're trapped inside our heads. Some of the primary focuses for this piece were motion graphics, exploring the mechanics within the editing program, and designing creative ways to move elements within the video with integrative, seamless transitions.StakeStake is a found footage piece about hurt, anger, and a scathing sense of self-resentment so built up overtime that it finally explodes and spills over. Self-transformation is inevitable, and as lava shapes the land and foundation we stand on, our suffering in life will do the same for our souls.Eyes Closed Eyes Closed is an animatic about the ruthlessness of war and how it doesn't discriminate between its

victims. The challenge for this piece was a comprehensive study of different camera shots in addition to creating a complete narrative. A combination of several industry-standard standard applications, including Photoshop and After Effects, were used to create the final video.

Mentor(s): Tankersley, Daniel

Dupuis, Jacques

Overtime

Mentor(s): Tankersley, Daniel

Chilton, Hannah

Primary Play, Tim Can't Change Colors, Memoryy, Breaking Down the Dance Routine

Mentor(s): Tankersley, Daniel

Reidy, Jordyn

Red

Mentor(s): Tankersley, Daniel

Stinar, Teresa

Stella, Eine Fee

Eine Fee is German for "the fairy." This animatics is a story inspired by the saying to "knock on wood." The origin of this common saying derived from German folklore that magical fairies lived in trees. When called upon, these fairies may grant your wish or bring you good fortune. Each frame was hand drawn in Illustrator.Stellar is a motion graphic animation timed to music. This film istudy on the interaction between geometric shapes and bursting fireworks.

Mentor(s): Tankersley, Daniel

Poehlitz, Bryce

Stressful Spellcasting, Take a Hint Man I Just Want to Drink Coffee in Peace

These two animations portray short, humorous interactions between two conflicting personalities. The first is a hand-drawn animatic with many fantastical elements, while the second is more colorful and dynamic but more melancholy in tone. Both animations feature voice acting and sound effects.

Mentor(s): Tankersley, Daniel

Timmons, Cory

surveillant memories, House Hunters: Multinational

surveillant memories is a metaphorical exploration of the way trauma becomes a source of constant surveillance in the mind of a survivor. The video also explores the pain of a parent knowing about the abuse of their child. It emphasizes the irony and tragedy of a parent's inability and desire to protect their child from the harms of the world. Just as in the original song by the artist Anohni, the use of the word "daddy" is metaphorical, and not intended to convey autobiographical information.House Hunters: Multinational is a parody and allegory personifying multinational corporations as home-buyers on the home buying "reality" show. The video merges the excesses of Corporate America and DIY culture, drawing a connection between the destructive nature of each. The desire for greater and greater profits is reflected in our desire for greater and greater homes, with no apex of fulfillment for either. The realtor is all of us – complicit in the crimes of these corporate nightmares yet forced into a position of subservience for sustenance.

Mentor(s): Tankersley, Daniel

Camacho, Manuel

The Conversation, Tide Pods

Mentor(s): Tankersley, Daniel

Schubert, Katherine

The Knight & The Maiden, Prima

Mentor(s): Tankersley, Daniel

Mitchell, Anna
The Prehistoric West
Mentor(s): Tankersley, Daniel

Farr, Katherine
The Watchers
Mentor(s): Tankersley, Daniel

Session: War, Wrestling, and Economics: Analysis of Media Messaging

Borling, Kalea

A Response of War From Across the Universe

Through a Textual, Discourse, and Political Economy Analysis, I examine the similarities of past and current views of war on society through a scene from the popular musical, Across the Universe. Released in 2007 and directed by Julie Taymor, this movie showed fictional events that symbolically presented the feelings and events that took place during the time of the Vietnam War. Through the artistic features of this film, I analyze how the different aspects of the scene showed a drafted soldier being objectified, which was impactful in light of the film being shown at the height of the wars in Iraq and Afghanistan. In turn, I will be using the film to then convey ideas about objectifying soldiers to benefit the film itself by resonating with the audience and expressing this controversial message in an entertaining musical produced to the public.
Mentor(s): Schowalter, Dana

Napoleon, Ta'ashi

WWE Women's Wrestling

In this paper, I will be using a discourse analysis lens to examine women's involvement in the "World Wrestling Entertainment." By focusing on and analyzing the portrayals of women wrestlers, types of matches available, and airtime for women in the WWE, I argue that women are given a double standard due to the hypersexualized and objectified roles women are forced to have and still cannot achieve the economic and

airtime successes of their male counterparts. This analysis shows that much work remains before we can say we have moved past the stigma that has been placed on the women's WWE division.

Mentor(s): Schowalter, Dana