

2025 URS Schedule as of 5.1.2025

9:15 - 10:20 am | Session I | Anderson University Center | Grey Area | Digital Posters

Anthony Adams Hannah Cecil Meghan Hamell Waylan Mettler Braeden Samura Landen Sexton Mollie Walker	Kinesiology	Promoting Inclusion Through Sport	The PLU KINS 384 class partnered with Team IMPACT to connect student-athletes with children facing serious illnesses and disabilities, fostering belonging and resilience. Through a needs assessment, social media outreach, and collaboration with SAAC, the campaign led to two official signings and increased awareness among PLU athletics, promoting inclusion through sport.
G Alvarado	Computer Science, Graphics Arts,	Through Science Comes Art!	Using cutting edge technology we can create like never before. From animations to special effects, dive behind the scenes and see how through science comes art!
Benjamin Helgeson Joshua Sandoval	Psychology	Enhancing Educational Outcomes: The Role of ChatGPT in Facilitating Effective Learning	ChatGPT is an artificial intelligence that has quickly become a widely adopted technology. We developed a mini-course that educators can use to enhance their students' learning as well as prepare students for a future shaped by AI.
Sophia Jeter	Hispanic Studies	Ley PROMESA: Displacement and Negative Impacts	The research for this project was conducted in Puerto Rico in January of 2025 on the topic of the economic and social impact of the PROMESA law or Ley PROMESA, the Puerto Rico Oversight, Management, and Economic Stability Act. This project consists of an examination of Ley Promesa and how it has negatively impacted Puerto Ricans and specifically women.
Madeline Rue	Physics	Watching Paint Dry: Simulating Real-World Environments to Study the Aging and Degradation of Paint	This project is an experiment that models different environments—museum, home, and uncontrolled settings—to study their effects on paint deterioration. By analyzing factors like light, temperature, and humidity, the research aims to understand how these conditions influence the aging and mechanical integrity of oil paint over time.
Bella Schneider	Global Studies	In Plain Sight: Genocide in Palestine	Through the use of international legal documents as well as theoretical frameworks regarding settler colonialism, my project demonstrates that the current conflict in Israel/Palestine is a legally defined genocide

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Paige Almanza Ralizsa Rosales	Organic Chemistry	Nickel as a catalyst in Buchwald-Hartwig coupling reactions to make anilines	Our project explores nickel as a catalyst in the synthesis of different pharmaceutical drug intermediates called anilines because of its sustainability and affordability relative to palladium.
Austen Bassler	Geoscience/Earth Science	Mapping Landslide Susceptibility: Integrating Lidar Analysis to Assess Risk in Kitsap County	My capstone project analyzes landslide susceptibility in Kitsap County using Lidar-derived topographic data and GIS-based spatial analysis. By examining various terrain types, I created a landslide susceptibility map to identify high-risk areas. This research enhances hazard assessment, infrastructure protection, and conservation while highlighting coastal erosion's impact on slope stability and long-term land management.
Logan Chung Heidi Olea-Baez	Organic Chemistry	Retro [2+2] Reactions of Cyclobutanes Using Riboflavin Tetraacetate as a Ring Opening-Photocatalyst	Cycloreversions of different cyclobutanes to make alkenes were examined using bright LED light and a vitamin B2-based catalyst. These conditions attempt to simulate the breakdown of cyclobutanes by biological enzymes called photolyases that repair DNA harmed by UV damage.
Morgan Dhy Abby Winkler	Organic Chemistry	Evaluating Skin-Care Photosensitizers' Roles in Catalyzing Thymine Dimerization	We are evaluating if ketones identified in over-the-counter skin care products can induce an alkene cycloaddition of the DNA base thymine under blue LED light conditions.
Lydia Flaspohler	Biology/Chemistry	Investigating the Effects of Salinity Manipulation on the Phytoplankton Species <i>Tisochrysis lutea</i>	This project investigates how the marine phytoplankton <i>Tisochrysis lutea</i> responds to salinity changes by analyzing growth and metabolite production. Findings show stable growth but shifts in metabolites, suggesting <i>T. lutea</i> adapts to salinity stress, offering insights into how phytoplankton may respond to climate-driven changes in ocean salinity.
April Kelly	Biology Research Internship	Analyzing Lion Kill Site Data at the N/a'an ku sê Foundation in Namibia	I will be presenting the findings from my internship study while abroad in Namibia, as well as the continued research to establish a guide for identifying African wild species to be used in scat analysis.
Aidan Koshinsky Victor Reyes	Organic Chemistry	Purple light-initiated oxidation of benzylic carbons using air	Our project aims to assess the feasibility and reaction products of oxidizing benzylic carbons irradiated by purple LEDs in the presence of air and green solvents such as water and alcohols.
Rebecka McDougall Sydney Tyre	Chemistry	Cobalt as a Sustainable Alternative to Palladium to Catalyze Sonogashira Cross-Coupling Reactions	We synthesized a special ligand for cobalt(II) acetate to develop a cobalt catalyst that can be used to replace traditional palladium catalysts in a Sonogashira cross-coupling reaction. Cobalt is a more cost-effective and earth-abundant alternative to replace palladium catalysts.
Annie Latimer	Earth Science	Accessing the Learning Outcomes of Virtual and In-Person Geological Field Trips	Manchester State Park is a widely used field site for PLU Earth Science classes. A virtual field trip was constructed to make sure that all students have the same learning outcomes no matter if they go into the field or take a virtual one. This study aims to access if the learning outcomes for both the in person and virtual field trips are the same.
Tog-yeum Junior Nagornagar	Chemistry, Biology	Amino Acid Analysis: The Extraction and Derivatization of Amino Acids in Seawater	This project was objective was to improve current methodology of detection of dissolved amino acid in seawater.
Jenna Nobel Nichole Parker	Chemistry	Cobalt and Nickel as Alternatives to Palladium in Wacker Oxidations	Wacker Oxidation reactions were performed utilizing green metal alternatives for palladium to evaluate their effectiveness.
Justinpal Singh	Chemistry	Precision Profiling of D-Amino Acids in Chronic Kidney Disease: Advanced Measurement Using 3D HPLC and NMR	This is my senior capstone for my BS in chemistry, with an emphasis in biochemistry. This is a review article that discusses two novel ways to measure D amino acids in human blood samples, which can make the diagnoses of chronic kidney disease be more reliable in nature.
Elijah Singleton	Chemistry/Biochemistry	Determining if Beta-catenin mutations drive ROS1 TKI resistance in CD74-ROS1 transformed cell lines	This project wanted to look at specific types of ROS1 positive cancers and how these cancers develop resistance to our targeted therapies in TKIs. This has implications in future treatment plans for treating lung cancers related to aberrant kinases and more efficiently treating kinase-positive cancers as a whole.

Luke Van Tassel	Biology/Ecology	Collection and Analysis of Environmental DNA at Morse Wildlife Preserve	This project collected and analyzed environmental DNA (eDNA) at the Morse Wildlife Preserve in Graham, WA.
Travis Weaver	Geoscience	Structural Geology of Manchester State Park	A geological study of the structures present at Manchester State Park in Bremerton, WA. this examines the three-dimensional structure of the faults present, to relate the ground motion to the Seattle fault zone and the active regional Tectonics.
9:15 - 10:20 am Session I Anderson University Center Room 201 Roundtable presentations			
Molly House Andrumada Edwards	Gender, Sexuality, and Race Studies	Reimagining Legal Spaces: A Feminist, Anti-Racist Praxis in the Clerk's Office of Pierce County Superior Court	This project explores the necessity of courthouse navigator programs through a feminist, anti-racist lens, examining intersectional leadership and systemic barriers in legal spaces. Through research, interviews, and practicum work with the Clerk's Office of Pierce County Superior Court, I analyze and contribute to efforts aimed at making the legal system more accessible.
Andrumada Edwards Molly House	Gender, Sexuality and Race Studies	'Staying Fat': Co-Creating Fat Joy and Exploring the Politics of Fatness, Joy, and Praxis	Fat Joy provides an alternative to body positivity, body neutrality, and fat acceptance using the politics of Black Joy.
Adi Kung	English	Love and Poison, A Poetry Exhibition	I will write a small number of poems (3-4), and I will run a round table where I read the poems out and then ask the listeners to comment on the content, form and function of the poetry. The goal is for them to reflect on the poems as art.
Sofia Navarro	Political Science	"We Like our I.C.E. Crushed": The Effects of Political Attacks on Latin@ Political Engagement and Resistance	Political attacks on Latin@s shape their civic engagement in complex ways, either suppressing participation through fear or fueling mobilization through resistance. This study explores how the Latino Threat Narrative and Racial Battle Fatigue influence Latin@ responses, highlighting the overarching collective activism as reactions to discrimination and xenophobia.
Eden Standley	Gender, Sexuality, and Race Studies; English; Communication, Art and Design; Education; Urban Forestry	Teaching the Power of Urban Trees through Play: A Board Game	A collaborative board game that teaches players to plant trees in urban spaces with considerations for utilities and tree species, and encourages players to think about the affective experience and purpose of urban tree planting.
10:30 - 11:00 am Keynote Welcome Anderson University Center CK Hall			
11:15 am - 12:20 pm Session II Ingram Lobby & Gallery Poster & Visual Arts presentations			
Jasper Bragg	Psychology	Patterns Between Human-Likeness and Reaction Time: Implications for Uncanny Valley	This study measured reaction times as participants categorized robot faces varying in human likeness. The emergence of a distinctive, incremental processing pattern challenges traditional theories of the uncanny valley, including categorical perception. These findings suggest face perception may be more continuous than previously thought and open new avenues for empirically investigating other elusive psychological phenomena.
Casey Chan	Design Arts	Dim Sum Card Set -- Flower Cards	These are 3 posters, depicting my own take on the face cards of playing card suits. Each suit is replaced by a dim sum dish. The face cards are based on flower tiles in mahjong (Chinese tile game). This project is a sample of my Capstone project.
Joshua Davis Kurtis Sacksteder	Economics	Impact of Institutional Development and Trade Liberalization on Poverty Reduction in Africa	This project includes a literature review and econometric analysis on the impacts of trade liberalization and development of institutions on poverty reduction in Africa.
Cody Dever	Political Science	Voting Early in America	Through a careful analysis of State and Federal election data, I seek to answer the question of how access to early voting options, such as vote by mail and early in person voting, affect voter turnout in US presidential Elections.
Isabelle Victoria Esposito	Political Science	A Racial Threat to Healthcare: Undocumented Hispanic and Latino Immigrants Across U.S. Sanctuary and Non-Sanctuary Cities	Undocumented Hispanic and Latino communities are the largest growing minorities in the U.S., negatively impacted by their lack of access to and utilization of healthcare programs made for citizens only. Deficient access and poor prioritization of health outcomes across sanctuary and non-sanctuary cities points to the racialization of their presence in an unjust American political culture.
Leona Fry	Political Science	Abortion as a Decisive Issue: Public Sentiment and Its Role in Shaping Presidential Elections	The Impact of Abortion on American Presidential Elections from the overturning of Roe v. Wade to the Dobbs decision, now looking at the outcome of the 2024 election.
Abigail Hall	Political Science, Global Studies (International Relations)	The Nuclear State: French Technocratic Governance and the European Pressurized Reactor	This is my combined International Relations (GLST) and Political Science capstone project. My project revolves around the trajectory of French nuclear energy policy and how that has resulted in France having a significant impact on the formation of nuclear energy policy in the rest of the EU. One way this impact has manifested is through the development of the European Pressurized Reactor (EPR) by France in partnership with ally organizations. I argue that the development and export of this technology could not have been achieved if it were not for the structure of French technocracy and the direct link between French national identity and the nuclear industry. This, being my undergraduate capstone, is research I plan to pick up on in my masters dissertation, so here, I am laying the foundation for more work going forward.
Aurie Huynh	Physics, Engineering	Arduino-based EEG Signal Acquisition System Using Arduino UNO	A personal research, learning project focusing on designing and implementing an electroencephalogram (EEG) signal acquisition system using Arduino UNO and NeuroSky MindWave Headset to acquire the electrical brain wave signals based-on a range of neural activities.
Lexie Looney	Earth Science, Education (STEM Education)	Unearthing Futures: Why Earth Science Matters in High School	A physical poster, designed to promote the benefits of having accessible Earth science courses within high school educational frameworks. The primary objective of this display is to cultivate a sustained interest in Earth science among high school students, ultimately fostering greater engagement with Earth science-related careers.

Olivia Petersen	Native American and Indigenous Studies	Oysters and Pearls: the Feminine Gaze on transcending containment	This art piece was done as a culminating reflection for the class Environmental Justice and Indigenous peoples. My main inspiration for this art piece comes from our text The Extractive Zone. Two ideas that I incorporate in my art piece are containment/entrapment and the Feminine Gaze.
Ess Taylor	Visual Arts	Mental Illness through Art	My project is about showcasing how my mental illness has impacted my artistic style, and how I demonstrate my experience with these illnesses through art.
12:30 - 1:35 pm Session III Anderson University Center CK Hall Digital & Poster Presentations			
Valeria Alvarez	Social Work	Bullying Prevention Presentation	This capstone project highlights the development and implementation of a training on bullying awareness. The presentation, designed for elementary aged students, focused on teaching elementary students what bullying is, why it is an issue, how to identify bullying, and ways to be an upstander. This presentation is grounded in the literature on bullying prevention, and is designed with interactive activities to engage the students.
Angie Bailon Magana	Social Work	Pierce County Resource Guide for Adolescents in Services	This presentation will discuss the creation of an up-to-date resource guide to support Catholic Community Services in navigating services for adolescents and families seeking services. This tool will support youth and families in finding resources within Pierce County that can provide more than mental health services. Building community connections to explore the various systems we can connect clients to.
Daniel Bensen	Health Humanities, Hispanic Studies, Religion	Redefining Our Ethos of Care: A case study on the religious values underlying medical practice at La Clinica del Pueblo in Oaxaca, Mexico.	This project drew on participant observation and formal interviews with physicians and healthcare administrators at a non-profit Franciscan hospital in Oaxaca, Mexico to better understand the ethical/spiritual foundation of and implications for socially engaged and culturally informed care.
Audrey Bonn	Social Work	The Kolt Store: A Positive Behavioral Intervention & Supports Program	The Kolt Store introduces a Positive Behavior Intervention System (PBIS) at Keithley Middle School in the form of a student store that aims to encourage and reinforce students to make positive behavior choices. PBIS allows staff to emphasize behaviors they want to continue while minimizing negative behaviors by building relationships and offering rewards. This project highlights the implementation of PBIS at Keithly, with a specific focus on the development of the Kolt Store as a means to support positive behaviors in this population.
Angeles Ceras-Medina	Social Work	DCYF Understanding Out-of-Home-Placements: A Policy Brief for Change	The child protection system is complex and intersects with many systems, which can be daunting for families. This project is focused on summarizing policies in place for out-of-placement youth in DCYF and gives detailed information on the policies in family-friendly language, so that parents are better equipped to understand the processes and engage with the system.
Lilybeth Esau	Social Work	Grounded Minds: Elective Course on Anxiety Management for Teens and Young Adults	This project highlights the implementation of an eight-week elective course for high school students working on credit recovery. Grounded Minds is an eight-week elective course that utilizes therapeutic and social work frameworks to help students (ages 16-18) to recognize, assess, and create positive habits to manage their individual anxieties.
Zachary Gong	Social Work	Mental Health Workbook for Adolescents and Youth: A Resource for Consejo Clients	This capstone highlights the creation of a mental health workbook developed for mental health therapists at Consejo Counseling and Referral Services. The tool is designed to support adolescent and youth clients experiencing depression, anxiety, trauma, and anger issues. Activities in the book were curated from multiple evidence-based sources and will be given to therapists to practice with their clients.
Zoneice Grose	Social Work	Upstander: Are You That Somebody? Bullying Interventions at Franklin Elementary School	The purpose of this project is to respond to bullying at Franklin Elementary. The interventions involved classroom lessons, engaging one-on-one with students, and teaching youth to be "upstanders" instead of "bystanders" to bullying. After reviewing multiple anti-bully programs, culturally responsive strategies were selected and tailored to suit the student body. Tailored strategies were developed through trial and error. School-based bully reports were reviewed pre- and post-implementation to assess the possible impact of the bullying prevention program at Franklin.
Hailey Guerra	Social Work	Stronger Together: A Culturally-Inclusive Resource Guide for Families in Child Protective Services	Racially diverse families face unique challenges and situations when interacting with child protective services. This pamphlet is developed to aid and guide families of color with culturally inclusive resources that are provided by the Department of Youth and Families. This resource guide is designed to support diverse families that struggle to find specific resources that resonate with them culturally.
Gracie Hansen	Social Work	Improving Seizure Response Policies at PLU	This policy and advocacy project focused on improving response policies at Pacific Lutheran University for students who have seizure disorders. The process involved developing personalized care plans for students with seizure disorders, collaborating with Campus Safety and the Wellbeing Services office, and ensuring students have input on their care plans and decisions during and after a seizure event.
Maria Lozano	Social Work	Housing is Prevention: Keeping Families Together Through Advocacy	This project recognizes that substance use disorders impact entire families and that successful recovery is more likely when individuals have access to stable housing, childcare, and a strong support system. This brochure will be sent to clean and sober landlords to advocate for housing that allows families to reside together.
Alondra Mendoza	Social Work	Palmer Pathways Resource Guide: A Tool for Youth and Staff to Better Access Services	This project was developed in response to feedback from Pathway's staff, who shared that referring students to community resources was often challenging & time-consuming. As a result, a digital resource guide highlighting the wide range of services available throughout Pierce County was developed. The guide is organized by areas of support and emphasizes the importance of providing timely and comprehensive wraparound services to scholars.

Sage Miller	Social Work	Responding to Barriers Specific to Domestic Violence Survivors within Faith Communities: Trainings for Advocates and Faith Leaders	This project is designed to explore the ways that religious communities can help or harm victims fleeing domestic violence. In response to the specific social barriers people within faith communities encounter when fleeing domestic violence, a 45-minute evidence-based training was designed for the advocates at the Crystal Judson Family Justice Center. This training will teach advocates how to navigate these situations using a strength-based approach to empower survivors within their faith communities. A second training was curated for educating church leaders and members on how to respond to congregants disclosing DV and general DV-informed practices.
Ally Redford	Social Work	Nurturing a Safe and Supportive School Community for Queer Youth: A Resource Pamphlet for School Support Staff	This capstone will focus on the development of a resource pamphlet that guides school staff on creating a safe and supportive school community for queer youth. This resource pamphlet was produced for Community In Schools of Lakewood to help site coordinators and other school support staff uplift and advocate for queer students.
Lilyanna Reed	Social Work	Consejo Counseling Amidst Changing Immigration Policy	In order to improve cultural responsiveness at Consejo Counseling and Referral Services, I have developed and presented a training concerning immigration law and ways it affects behavioral health providers. This training was given to therapists and social workers at my agency.
Belen Segura Zapata	Social Work	The History of Citizenship and Immigration Policy in the United States: An Advanced Training for Advocates	While many agencies work to support families with immigration and citizenship needs, the long and complex history of immigration policy in the US is not always known by advocates working for families. This training is designed to educate advocates on the history of immigration policy in the U.S., providing context for the current anti-immigration attitudes in our communities.
Blake Swales	Music	The Power of Music	This project will be showcasing, what the power of music can truly do. From an idea created into a full electronic track. This will prove the statement of Music Production being the Future of music. Presented by the artist SkytbnSwales (Sky-t-b-m-Swyalz)
Rayleah Trice	Social Work	Supportive Journaling for Youth Experiencing Domestic Violence: Empowering Youth to Envision Safe and Healthy Futures	The Supportive Journal for Youth Experiencing Domestic Violence is a resource tool developed for the Crystal Judson Family Justice Center. The Journal is a tool that utilizes multiple intervention theories to educate teenagers about intimate partner violence. Youth will learn how to recognize signs of abuse, how to set and uphold boundaries, and how to create change within themselves to securely attach to others.
Taezha Watson	Gender, Sexuality, and Race Studies	Not By Choice: Mothering, Caretaking, and Black Womxn's Labor in Higher Education	In this study, we explore mothering, or the demand that Black womxn caretake for everyone but themselves. We are curious how Black undergraduate womxn at PWIs navigate misogyny and emotional caretaking while in student leader positions. We will conduct a Sista Circle study with 10-12 individuals to answer this question.
Denise Valencia Lemus	Social Work	Creating a Culture of Care: Mental Health Awareness in the DCYF Workplace	Child protection workers have some of the highest burnout rates of any social work role. The purpose of this presentation is to bring awareness of mental health struggles and burnout in DCYF staff. This pamphlet was developed to help workers identify the signs and symptoms of burnout while providing resources and information for seeking support.
Areli Villegas-Alvarez	Social Work	Building a Centralized Resource Booklet for Pierce County for the Parent Child Assistance Program PCAP	Data has shown that knowledge about resources improves clients' access. This project develops a booklet with resources and services that are most needed amongst PCAP clients. The goal is to condense and update resources and services into one booklet, and to empower clients with accessible information. In this way clients can rely on the booklet whenever they need to and allows them to ask for help with any resource they are interested in.
Krystal VonGnatensky	Social Work	HUD Mobility Grant Development for Families with Children Under 13: A Survey to Inform Future Projects	HUD is currently promoting housing mobility, which encourages families to move to better-resourced communities. This program evaluation aims to identify and understand barriers that participants of the Housing Choice Voucher program experience accessing these areas. The data will support Pierce County Housing Authority in adapting current programs to promote greater access to sustainable housing for families with children under 13.