

Saint Martin's University



SCHOLARS DAY

April 23rd, 2024

STUDENT SCHOLARS

Presentations:

Kristine Abadilla	Yuan Angelo	Nathan McLellan	Hector Santiago
Jillian Abbe	Fernandez	Andrew Milholland	Andrew Schulz
Reine Albite	Hollie Filyaw	Lily Miller	Rae Simpson
Hunter Anderson	Kaylee Florek	Octavio Moran	Paarth Singh
Steven Araki	Erica Garrett	Samuel Morris	Kaylee Slone
Huda Ashraf	Kevyn Gordon	Lyea Mulugeta	Karla Soto
Christian Bianes-Delrosario	Cole Hatton	Stephen Norby	Hector Soto
Abigail Bozarth	Audrey Hays	Garrett Orwig	Emma Storm
Grace Brenner	Kailee Higa	Harriett Osara-Guice	Om Tada
Mary Brownell	Nevaeh Hughes	Riley Phelps	Kaylah Tibbits
Joshua Camper	Greer Hurley	Kaeli Ploettner	Erick Tornquist
Olivia Cervantez	Hayden Jones	Vanessa Ponce	Elizandrea Tuatoo
Sidney Coates	Sabrina Kerce	Krizia Marie	Tamera-Leialoha Vivao
Abigail Collins	Chalise King	Ragotero	Madison Vu
Shelby Day	Justus Konwent	Jed Raqueno	Mikayla Wall
Nadaa Elbarbary	Zoe Krausmann	Michael Rivet	Kamara White
Eli Eldridge	Denisse Lopez-Nolasco	Jera Roller	Alexander Wickett
Clara Eliason	Amista Lujan	Nova Rosette-Perez	Vanessa Wilmoth
Serena Elliott	Kayla May	Melia Salangdron	Kyle Wilson

Poster Presenters:

Peter Abongo	Betsy Francisco	Sheyenne Martin	Sara Sabra
Paydrick Adams	Cervantes	Medi Mbuyu	Noah Simons
Fadk Alam	Emily Fuller	Kimberly Melton	Isaiah Simpson
Anelle Alvarez	Alyssa Gaskill	Rehea Monroy	Vanessa Smoke
Cervantes	Imahni Hawkins	Lauryn Morris	Jennifer Thomas
Joy Bamford	Alie Horton	Sprinkler	Tabitha Tucker
Staci Barnes	Kyal Huntley	Newmann-Godful	Alyssa Twogood
Bethany Calaycay	Nurgazy Kaipov	Malia Paulsen	Vanessa Villa
Jaden Carson	Ellison Kephart	Amaya Paulsen	Cervantes
Emily Chong	Brandi Kight	Victor Phillips	Cassidy Walchak-Sloan
Kesem Coggins	Kaylei Kovacs	Elaina Pyke	Alicia Wasson
Destiny Conerly	Keely Layne	Bethany Renner	FeliciaMonic
Laia Currius	Keely Layne	Christina Robinson	Yelladay
Jina Evans	Austine LeBlanc	John Rodriguez	
Emily Fisher	Erin Luong	Elizabeth Rounis-Anderson	
Fe Flores	Kelene Mandefro	Jayne Sabo	
Gabriella Forbes	Bernand Mariano		

Faculty Sponsors

Mc Erl Dave Andres, Instructor, Women's, Gender and Ethnic Studies
Dr. Shandeigh Berry, Assistant Professor, Nursing
Dr. Kayla Blyman, Assistant Professor, Mathematics
Dr. Julia Chavez, Professor, English
John Craighill, MPA, Lecturer, Accounting
Dr. Patrick Cooper, Assistant Professor, Theology and Religious Studies
Dr. Emily Coyle, Associate Professor, Psychology
Dr. Shawn Duan, Professor, Mechanical Engineering
Dr. Radana Dvorak, Associate Professor, Computer Science
Dr. Megan Friesen, Assistant Professor, Biology
Dr. Irina Gendelman, Professor, Communication Studies
Dr. Mary Jo Hartman, Professor, Biology
Dr. Robert Hauhart, Professor, Criminal Justice, Legal Studies
Dr. Michelle Hudders, Assistant Professor, Nursing
Dr. Andrea Kunder, Associate Professor, Physics
Dr. Linda Maier, Associate Professor, Education
Dr. Stephen Mead, Professor, English
Dr. Gregory Milligan, Professor, Chemistry
Dr. Diane Nauer, Assistant Professor, Nursing
Dr. Jeremy Newton, Professor, Psychology
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Dr. Hunhui Oh, Associate Professor, Social Work
Dr. Julie Prosser, Assistant Professor, Psychology
Dr. Lori Sirs, Assistant Professor, Social Work
Dr. David Slotwinski, Lecturer, Business
Dr. Jennifer Thomas, Adjunct Professor, Nursing
Dr. Yunchen Tian, Assistant Professor, Political Science
Dr. Linda Trader, Faculty Nursing Instructor
Dr. Celeste Trimble, Associate Professor, Education
Dr. Jill Walsh, Associate Professor, Civil Engineering
John Whiteman, Adjunct Professor, Computer Science
Dr. Teri Woo, Director, Nursing

Session One Presentations

1:00 – 1:25pm

Erica Garrett, Kevyn Gordon, “Race & Ethnic Studies Essential to Higher Education” HH115

Abigail Collins, “Addressing Recidivism Through Alternative Treatment Methods” HH116

Madison Vu, “Developing an Evaluation Model for BIPOC Student Mentorship Programs” HH117

Sabrina Kerce, ‘Analysis of Pyrethroid, Organophosphate, and Organochlorine Pesticides Coffee Beans to Explore the Effect of Roasting” HH210

Kristine Abadilla, Yuan Angelo Fernandez, Melia Salangdron HH212
“Examining the Implications of Acculturation Strategies of Asian American, Native Hawaiian and Pacific Islander (AANHPI) College Students on Overall Wellbeing and Academic Performance”

NO PRESENTATION HH214

Audrey Hays, “RR Lyrae in Globular clusters” HH213

Hector Soto, “Action Research: Incorporating Social-Emotional Learnings in Science Education through Wellness Wednesdays” HH215

Session Two Presentations

1:30 – 1:55pm

Hector Santiago, Alexander Wickett, “Pedagogy of the Cave: Revitalizing the Liberal Arts through Gregory the Great’s Vision of Benedict’s Spirituality” HH115

Clara Eliason, “Analysis of Solitary Confinement in the United States Prison System” HH116

Kyle Wilson, “Bridging the Abstract and Sensory: Examining the Topology of Video Games” HH117

Vanessa Wilmoth, “Polyphenol Content and Composition in Strawberries Grown with Different Fertilizers” HH210

Emma Storm, Joshua Camper, “Stigmatized Learning Disabilities Amongst College Students” HH212

NO PRESENTATION HH214

Nadaa Elbarbary, Kriizia Marie Ragotero, Garrett Orwig, Hayden Jones
“Smart IoT Hidden Device Detector” HH213

Abigail Bozarth HH215
“Classrooms to Campuses: Understanding the Influence of High School Math Experience and Attitudes on College Math Engagement”

Session Three Presentations

2:00 – 2:25pm

Denisse Lopez-Nolasco HH115
“Beyond Borders: Exploring Our Lady of Guadalupe's Reach Through Cultural Context”

Chalise King HH116
“Criminological Theory at the Intersection of Race, Class, and Gender”

Sidney Coates, Samuel Morris, Michael Rivet, Madison Vu, Kyle Wilson HH117
“Math Modeling Mayhem”

Kaylee Slone HH210
“Synthesis, Characterization, and Catalysis of Boro-Phosphoric Acid”

Mikayla Wall HH212
“Adverse Childhood Experiences Effect on College Students Ability to Self-Regulate Emotions in Situations with Increased Stress”

Christian Bianes-Delrosario HH214
“An Analysis of Controversial Governing in the Philippines”

Grace Brenner, Reine Albite, Kaylee Florek. HH213
“Palm Tree Resorts Case Study”

Huda Ashraf HH215
“Student of Color Experiences with Racial Battle Fatigue”

Session Four Presentations

2:30 – 2:55pm

Jillian Abbe HH115
“Language and Consciousness in Ishiguro's Never Let Me Go”

Shelby Day HH116
“Determining the Sufficiency of Private Security Guard Laws and Regulations in the U.S. through Statutory Analysis”

Olivia Cervantez HH117
“Potential Threat of African Clawed Frogs (*Xenopus laevis*) to Native Salmonid Populations”

Hunter Anderson, Kaeli Ploettner, Hollie Filyaw HH210
“Electric Catkin Pollen Harvester”

Kailee Higa HH212
“Pacific Islander X College Student”

Vanessa Ponce, Serena Elliott, Jed Raqueno HH214
“People Over Politics: Equity in Washington State Policies”

Karla Soto, Om Tada, Andrew Shulz, Octavio Moran HH213
“Local Like You”

Nevaeh Hughes, Lyea Mulugeta HH215
“The Way We See Beneath the Eyes”

Session Five Presentations

3:00 – 3:25pm

Kayla May HH115
“Social Media’s Impact on Fan Engagement and Loyalty: Navigating the Use of Social Media as a Marketing Tool for Non-Professional Entities”

Lily Miller HH116
“The Decline of the Death Penalty: Is Capital Punishment Necessary?”

Tamera-Leialoha Vivao HH117
“Effects of Bisphenol-a on the Growth of Glycine Max”

Justus Konwent, Kaylah Tibbits, Mary Brownell HH210
“Senior design presentation from the Iso's”

Rae Simpson HH212
“The Impact of Compassion Fatigue, Burnout, and Incivility on Correctional Nurses”

Paarth Singh HH214
“Pathways of Privilege: Unraveling Affluence's Impact on Refugee Dispersion”

Greer Hurley, Andrew Milholland, Eli Eldridge HH213
“We Love Rainier's Public Disc Golf Course”

Erick Tornquist HH215
“Red Dress”

Session Six Presentations

3:30 – 3:55pm

Kamara White HH115
“Advocating for Social Change: Voices of Generation Z- COR120 eBook”

Harriett Osara-Guice HH116
“The Effects of Secondary Traumatic Stress on Juvenile Probation Officers and The Promotion of Self-Care”

Nathan McLellan HH117
“The occurrence of Chinook Salmon juveniles in the diets of Cutthroat Trout, Black Crappie, and Yellow Perch in South Lake Sammamish”

Riley Phelps, Steven Araki, Stephen Norby HH210
“Hydraulic Damper for Pulsation Reduction”

Zoe Krausmann HH212
“Why Substance and Drug Abuse Is Correlated to Crime”

Amista Lujan HH214
“The Attitudes of Guamanians on Guam’s Current Political Status”

Jera Roller, Cole Hatton, Elizandrea Tuatoo HH213
“BA499- Glo-Bus corporate simulation. Team Dual Dynamics”

Nova Rosette-Perez HH215
“Transcending Boundaries: Intersections of Faith, Literary Expression, and Community Empowerment in 'The Poet X'”

Scholars Day Presentations Abstracts Per Discipline

College of Arts and Sciences

Biology: Dr. Megan Friesen

Olivia Cervantez, “Potential threat of African Clawed Frogs (*Xenopus laevis*) to Native Salmonid Populations”

Salmon in Washington State provide cultural, economic, and ecological benefits. Invasive species threaten native species and change the interactions these species have in their ecosystems. African clawed frogs (ACF) are a prolific and cryptic invasive predator found in many of Washington State’s waterways. Their generalist diet poses a serious threat to salmonid species. To understand the overall threat level ACF pose on ecosystems, I investigated prey preference, and possible size constraint associated with Coho length.

Biology: Dr. Mary Jo Hartman

Tamera-Leialoha Vivao, “Effects of Bisphenol-a on the Growth of Glycine Max”

The ubiquity of plastic pollution has sparked concern about the ecological damage it poses to all organisms. Bisphenol-a (BPA), a chemical used primarily in the production of polycarbonate plastics and epoxy resins, has shown to leach from these plastics and elicit slight to moderate toxicity to plants. This research focused on the effect of BPA on Glycine max growth. Preliminary findings, including germination rates, dry mass, and stem lengths, indicate that BPA encourages plant growth.

Nathan McLellan, “The occurrence of Chinook Salmon juveniles in the diets of Cutthroat Trout, Black Crappie, and Yellow Perch in South Lake Sammamish”

The affect of predators on juvenile Chinook salmon in the southern end of Lake Sammamish, Washington is not widely known. This project examines the dietary contents of various fish species that live in the south end of Lake Sammamish and whether or not they eat a large amount of juvenile salmonids.

Chemistry: Dr. Gregory Milligan

Sabrina Kerce, ‘Analysis of Pyrethroid, Organophosphate, and Organochlorine Pesticides Coffee Beans to Explore the Effect of Roasting’

Coffee is one of the most consumed beverages in the world. Coffee has many health benefits, however, it is often heavily chemically treated, so drinking coffee can expose humans to pesticides and other harsh chemicals. This research looked at the effect that roasting has on pesticide residues in coffee beans by taking one brand of coffee and comparing its different roasts.

Kaylee Slone, "Synthesis, Characterization, and Catalysis of Boro-Phosphoric Acid"

Catalytic activity of boro-phosphoric acid is largely unknown while catalytic activity of boric acid is well established in many reactions. Boro-phosphoric acid can be synthesized in large quantities by a simple one-step procedure. Henceforth, x-ray diffraction was used to determine if the compound was a mixture or a product. Titration curves were done to determine the pKa value. Esterification and dehydration reactions were used to study the ability of boro-phosphoric acid to perform acid catalysis.

Vanessa Wilmoth, "Polyphenol Content and Composition in Strawberries Grown with Different Fertilizers"

Research on polyphenols is an emerging topic of interest due to their antioxidant properties. Antioxidants are important because they play a critical role in reducing oxidative stress in the body. Previous studies have linked the polyphenol content in strawberries to their antioxidant properties, as well as found differences in polyphenol composition and antioxidant potential in the strawberries. However, the specific composition of polyphenols in strawberries grown using different fertilizers is a topic that has been seldom explored. The total polyphenol content in strawberries can be determined using the folin-ciocalteu colorimetric method, and the polyphenol composition can be determined by using HPLC and comparing to standards. Results will be presented.

Communication Studies: Dr. Irina Gendelman

Kayla May, "Social Media's Impact on Fan Engagement and Loyalty: Navigating the Use of Social Media as a Marketing Tool for Non-Professional Entities"

The focus of this research is to examine how social media can be used as a tool in non-professional sports markets to increase fan engagement and loyalty with a team, organization, or brand. This examination will be conducted through collecting sport consumers responses via online survey and analyzing the National Basketball Association and the National Football League's social media accounts. My results agree with what other researchers have found regarding the professional organizations yet, I was able to draw new conclusions that are more applicable to smaller, non-professional sports organizations.

Criminal Justice: Dr. Robert Hauhart

Abigail Collins, "Addressing Recidivism Through Alternative Treatment Methods"

Since the first established treatment court in 1989, the utilization of alternative sentencing has developed across the United States. Alternative sentencing provides methods to punish offenders without the use of incarceration. Sentencing alternatives such as treatment court and diversion programs support offenders by providing services that promote rehabilitation. Moreover, there is a growing body of research in the field examining the effects of sentencing alternatives on offenders, and the offender's likelihood of reoffending. Likewise, research suggests positive correlations between the use of sentencing alternatives and a reduction in recidivism rates. Sentencing alternatives need further attention placed on improvement and reconstruction in order to successfully rehabilitate more offenders. Consequently, the strengths of sentencing alternatives will provide better aid to offenders seeking treatment.

Shelby Day, “Determining the Sufficiency of Private Security Guard Laws and Regulations in the U.S. through Statutory Analysis”

The utilization of private security guards is prevalent in the United States, and while objectively having separate purposes and legal powers, these guards have begun to take on a police-like assimilation with the authority and imagery they publicly exude. These similarities pose multiple risks to the legal rights and safety of the public, as well as the guards themselves, yet private security is disparately regulated on a state-by-state basis. By conducting analysis to determine the degree of variance across each state’s regulations, the sufficiency of the found national standard is determined when taking into account the risks posed by the profession.

Clara Eliason, “Analysis of Solitary Confinement in the United States Prison System”

This presentation explores the history and current widespread practice of solitary confinement within the United States prison system. It highlights the adverse effects it has on individuals, both mental and physical. In addition, it discusses five cases that have significantly impacted prisoners' rights and the standard of care received during their sentence. This presentation analyzes how solitary confinement is regulated under the current interpretation of the law according to the courts, particularly the Eighth Amendment and due process. Finally, this paper touches on reforming solitary confinement.

Chalise King, “Criminological Theory at the Intersection of Race, Class, and Gender”

The relationship between intersectionality and criminological theory is presently being analyzed to incorporate race, class and gender as not only dependent variables, but explanatory ones. The aim here is to examine how gender, race and class influence criminological theory and to attempt to recognize any specific intersectionality’s which are most deeply affected by the responses put into action because of said theories to prevent crime. failing to consider one’s unique social status may yield false results when attempting to correlate intersectionality and criminological theory. Concluding, a discussion will be brought forth about how criminological theories can be changed due to the inclusion of intersectionality.

Zoe Krausmann, “Why Substance and Drug Abuse Is Correlated to Crime”

Substance and drug abuse is a prevalent and significant issue in society because it claims the lives of many, and its correlation to crime cannot be denied. If society paid more attention and put effort into this field of research, it may have incredibly positive outcomes for not only the individuals involved but society as a whole. This paper will discuss what substance and drug abuse is, the various substances or drugs that are commonly abused, how the abuse relates to crime as well as recidivism rates, mental health's role in substance and drug abuse, why this topic holds significant merit, and how treatment programs have shown to be beneficial. This paper will also discuss how this thesis of why substance and drug abuse is correlated to crime is also supported by past studies and peer-reviewed research that have all pointed out the correlation between substance and drug abuse with crime. This discussion will also mention a disclaimer that just because drug and substance abuse is correlated to crime, it does not imply causation of a criminal act, as well as the fact that not every individual who abuses drugs or substances will be involved in criminal activity. Spending time on this significant issue could help society if society focused more on eliminating substance abuse. This would also help reduce crime prevention, enforcement, and rehabilitation costs.

Lily Miller, “The Decline of the Death Penalty: Is Capital Punishment Necessary?”

Use of the death penalty increased throughout the seventeenth, eighteenth, and nineteenth centuries. Since its reinstatement in 1976, executions have decreased by 75%. Due to the decline, this thesis paper identifies whether the death penalty is necessary for punishment. Research on public opinion of the death penalty indicates that more people believe the death penalty is applied unfairly than fairly. The death penalty remains to be the only type of capital punishment allowed in America, however, it appears the States could abolish it one-by-one.

Harriett Osara-Guice, “The Effects of Secondary Traumatic Stress on Juvenile Probation Officers and The Promotion of Self-Care”

Due to the lack of existing literature on Secondary Traumatic Stress among juvenile justice workers, this paper focuses on the traumatic stories encountered by probation officers. Juvenile justice workers often are at risk of developing the effects of secondary traumatic stress, including health troubles, burnout, and poor job performance. Therefore, administering a Secondary Traumatic Stress test, Burnout questionnaire, and conducting interviews with these workers will expand the knowledge of how these officers are affected.

English: Dr. Julia Chavez

Kamara White, “Advocating for Social Change Voices of Generation Z- COR120 eBook”

As managing Editor-in-Chief, along with my peers, we produced an eBook as a final project in Professor Chavez's Fall Semester COR120 class, during the advocacy writing unit. The essays in this eBook blend research and innovative solutions, to address pressing societal issues that Generation Z and others face today. This class project serves as a platform to inform the SMU community about topics relevant to our daily experiences, showcasing our class's diverse perspectives and shared commitment to advocating for social change. With facts and insightful solutions, our writing aims to inspire action and promote dialogue on issues ranging from environmental sustainability to social justice. This collection of texts reflects the vibrant voices of Generation Z, demonstrating how writing can promote positive social development.

English: Dr. Stephen Mead

Jillian Abbe, “Language and Consciousness in Ishiguro's Never Let Me Go”

Kazuo Ishiguro's novel, Never Let Me Go, portrays a dystopian society in which clones are raised as organ donors for humans. Investigating Ishiguro's work through Karl Marx and George Orwell's contrasting theories reveals how language was manipulated to pacify the clones and build human support for the program. Ishiguro's novel shows that the language we use does not simply reflect our material conditions; language has the power to create human consciousness and change the world.

Mathematics: Dr. Kayla Blyman

Sidney Coates, Samuel Morris, Michael Rivet, Madison Vu, Kyle Wilson, “Math Modeling Mayhem”

- Sea Lampreys and Controllable Sex Ratios: A Quick Mathematical Model and Analysis
- Physical Surveillance: A Mathematical Model in Discretion and Control
- The Swings of Swings: Student Contest Modeling of Momentum in Tennis Matches

Madison Vu, “Developing an Evaluation Model for BIPOC Student Mentorship Programs”

The Olympia School District Student Mentor program fosters academic and socioemotional support for BIPOC students. Using quantitative and qualitative data, I developed a model to help evaluate the program’s effectiveness in enhancing academic achievement and promoting social belonging. This model will be used to help understand the effects of this program. Additionally, I will discuss how we can effectively communicate to administrators the value and necessity of programs like these in fostering student success.

Kyle Wilson, “Bridging the Abstract and Sensory: Examining the Topology of Video Games”

I am driven to forge a bond between the abstract nature of pure mathematics and the sensory nature of visualization. In this presentation, I will detail connections made – and hardships faced – as I ventured into topology; touching on topics from Abstract Algebra, Geometry, and Linear Algebra. I will analyze video games through the lens of topology to determine optimal strategies, reflect on the shortcomings of this analysis, and discuss opportunities for further research.

Nursing: Dr. Teri Woo

Rae Simpson, “The Impact of Compassion Fatigue, Burnout, and Incivility on Correctional Nurses”

Alarm fatigue is sensory overload when nurses are exposed to excessive alarms. This causes delayed reaction to nonactionable and actionable alarms in ICUs. The CEASE bundle (communication, electrodes, appropriateness, setup, and education) can be used to mitigate alarm fatigue. The process for implementing CEASE would be introducing ICU staff to the bundle, surveying the staff, adding the bundle to charting systems, creating posters, and adding it to continuing education requirements.

Physics: Dr. Andrea Kunder

Audrey Hays, “RR Lyrae in Globular clusters”

This study analyzes the properties of RR Lyrae stars in the centrally concentrated regions of the Milky Way Galaxy. We are confirming the presence of RR Lyrae stars in bulge Globular Clusters and we will use these stars to derive precise distances to the Globular Clusters. In this way, we can map out the spatial distribution of old stellar populations in the Milky Way Galaxy, do determine its structure.

Political Science: Yunchen Tian

Christian Bianes-Delrosario, “An Analysis of Controversial Governing in the Philippines”

Rodrigo Duterte's presidency is often considered to be controversial. However, the way which Duterte governed the Philippines is most certainly not new to the citizens. Extensive background research on the presidencies of Ferdinand Marcos Sr. and Rodrigo Duterte has allowed the opportunity to analyze the history of the controversial ways in which these president have governed the Philippines in the past and how it affects citizens to this day.

Amista Lujan, “The Attitudes of Guamanians on Guam’s Current Political Status”

This research analyzes differing factors that may impact the political preference if Guamanians on their current and future political standing with the United States. To find specific factors that may play a part in impacting the political views of the local people, I have isolated similar issues in other islands/countries that have had American influence. A survey was conducted and found a correlation between environmental impact and the preferred political status to stay is.

Vanessa Ponce, Serena Elliott, Jed Raqueno, “People Over Politics: Equity in Washington State Policies”

It is time to put people over politics in the state of Washington in order to ensure an equitable system is in place. Ponce will discuss the ways in which Washington can improve the process of districting to ensure fair access to voting. Raqueno will be presenting the current state of healthcare affordability in Washington state, identifying areas of improvement, and proposing a few policies that hopefully will address these issues. Elliott will offer insights into the effectiveness of Washington State's response to the mental health crisis during and following the COVID-19 pandemic. Our presentation aims to dive into the evolution of Washington State policies while emphasizing equity.

Paarth Singh, “Pathways of Privilege: Unraveling Affluence's Impact on Refugee Dispersion”

This paper studies refugee spread from eight major crises in the 21st century in relation to the affluence of each state of origin. Through UNHCR and World Bank data, clear relationships are seen between GDP per capita and the main spread metrics of relocation distance and hosting in neighboring countries. Additionally, key patterns are also observed in changes in the spread metrics before and during a crisis, as well as in relation to change in refugee stock.

Psychology: Dr. Jeremy Newton

Kristine Abadilla, Yuan Angelo Fernandez, Melia Salangdron, “Examining the Implications of Acculturation Strategies of Asian American, Native Hawaiian and Pacific Islander (AANHPI) College Students on Overall Wellbeing and Academic Performance”

This cross-cultural study measures how the different ways of “fitting in” the dominant American culture impacts the well-being and academic performance of Asian American, Native Hawaiian, and Pacific Islander college students. The study compares survey responses and statements gained from interviews with AA/NH/PI undergraduate and graduate students, utilizing a disaggregated approach to acknowledge each diverse identities with respect to their unique experiences.

Emma Storm, Joshua Camper, “Stigmatized Learning Disabilities Amongst College Students”

This research focuses on the stigma existing for college students who have a learning disability such as Attention-Deficit/Hyperactivity Disorder (ADHD), Dyslexia, and Dyscalculia. We used a survey to examine the perception of learning disabilities and related services at Saint Martin University. We found that students have used many resources available to them including the disability center as a guide to help better themselves in terms of education and stress related to their learning disability.

Mikayla Wall, “Adverse Childhood Experiences Effect on College Students Ability to Self-Regulate Emotions in Situations with Increased Stress”

This research analyzes differing factors that may impact the political preference if Guamanians on their current and future political standing with the United States. To find specific factors that may play a part in impacting the political views of the local people, I have isolated similar issues in other islands/countries that have had American influence. A survey was conducted and found a correlation between environmental impact and the preferred political status to stay is.

Psychology: Dr. Julie Prosser

Kailee Higa, “Pacific Islander X College Student”

Seen through the eyes of actual Pacific Islander Saint Martin’s students, this presentation exposes the existing barriers impacting their ability to thrive on campus. Existing literature provides information about Pacific Islander culture and student life, separately, but the intersectionality of these identities is often invisible. Designed to address these issues, the College Program for Pacific Islander Students (CPPI) is presented as an initiative to better support the needs of Pacific Islander college students.

Theology & Religious Studies: Dr. Patrick Cooper

Denisse Lopez-Nolasco, “Beyond Borders: Exploring Our Lady of Guadalupe's Reach Through Cultural Context”

My paper analyzes the significance of Our Lady of Guadalupe's apparition and its initial and lasting impact. The preserved tilma is not the focal point of this study, however, since conversions mainly occurred through hearing the story. By focusing on the detailed story of Juan Diego’s interactions with Our Lady, the study shows how the Gospel message rapidly became internalized and marked by a dramatic cultural shift towards Christianity.

Hector Santiago, Alexander Wickett, “Pedagogy of the Cave: Revitalizing the Liberal Arts through Gregory the Great’s Vision of Benedict’s Spirituality”

This joint presentation is rooted in a theological examination of two distinct symbolic motifs from Gregory the Great’s “The Life of Saint Benedict” and shows how they form an alternative pedagogical model modern educators can use to revitalize the liberal arts within their classrooms and institutions. We contend that this model offers a uniquely Benedictine response to the current decline in the perceived value of a liberal arts education, as evidenced by recent enrollment trends.

Women’s, Gender and Ethnic Studies: Mc Erl Dave Andres

Erica Garrett, Kevyn Gordon, “Race & Ethnic Studies Essential to Higher Education”

These essays address the topics of the hidden prejudices in the American education system, the problems of police brutality in the United States, and the importance of Race and Ethnic Studies in the higher education setting. It also discusses the disinformation spread across the media about Critical Race Theory. As well as the implementations, and the impact of Race and Ethnic Studies on white students and students of color.

College of Education and Counseling

Education: Dr. Linda Maier

Huda Ashraf, “Student of Color Experiences with Racial Battle Fatigue”

The present study aims to understand the Student of Color (SOC) experience at SMU. This study explores SOC experiences with racial microaggression, and the psychological stress associated with Racial Battle Fatigue (RBF). Findings of the study reflect the lived experiences of SOC with racial microaggression and RBF on our campus and future directions for faculty and Student Affairs on promoting diversity, equity, inclusion and belonging in higher education.

Abigail Bozarth, “Classrooms to Campuses: Understanding the Influence of High School Math Experience and Attitudes on College Math Engagement”

Adolescence is a critical time for students to develop their own relationships with content areas. In high school, and especially in college, many students avoid engaging with mathematics as much as possible. In this talk, I will share my research that explores how student perceptions of their high school mathematics experiences impact their levels of engagement with college mathematics using survey data from Saint Martin’s University undergraduate students.

Hector Soto, “Action Research: Incorporating Social-Emotional Learnings in Science Education through Wellness Wednesdays”

This action research paper discusses incorporating social-emotional learning (SEL) in a science classroom through Wellness Wednesday’s lessons. The study narrates the development of SEL lessons and workshops and intends to measure their effectiveness in enhancing student well-being. The contexts discussed are metacognition, the SEL framework, and the impact of the COVID-19 pandemic on students. Through surveys and interviews, we find that these lessons can effectively close the SEL gap created during the remote education period.

Education: Dr. Celeste Trimble

Nevaeh Hughes, Lyea Mulugeta, “The Way We See Beneath the Eyes”

For our final project, our topic will be writing a poem about fashion in the Native American culture and what it represents. How we will engage with this topic is rewatching the Red Dress film or we would also use some books from class to help us get ideas about how to start our research.

Nova Rosette-Perez, “Transcending Boundaries: Intersections of Faith, Literary Expression, and Community Empowerment in 'The Poet X'”

This presentation explores how youth literature, particularly 'The Poet X', reflects religious themes and empowers marginalized youth in gang affected areas. It compares these themes with gang violence prevention efforts by the Animadoras and Father Greg Boyle in the Boyle Heights' Dolores Mission Neighborhood. By examining how literature, religion and community action intersect, it sheds light on the potential for positive change through, faith, and community engagement and leadership.

Erick Tornquist, “Red Dress”

The red dress is an iconic symbol of Missing and Murdered Indigenous Women and Girls and Two-Spirit people. The art piece was created by blowing and shaping glass into the form of a red dress. The red dress is a symbol for all the families that have been affected from the loss of a loved one with no extra resources to get their loved one back or any sense of justice.

The Hal and Inge Marcus School of Engineering

Civil Engineering: Dr. Jill Walsh

Greer Hurley, Andrew Milholland, Eli Eldridge, “We Love Rainier's Public Disc Golf Course”

By applying known engineering principles in structural and geotechnical design, it’s possible to create a welcoming and noninvasive disc golf course. This project focuses on the planning and design of an open-air, public recreational facility for the city. The new disc golf course will encourage both the locals' interest in an unfamiliar sport and non-local players to visit the town.

Mechanical Engineering: Dr. Shawn Duan

Hunter Anderson, Kaeli Ploettner, Hollie Filyaw, “Electric Catkin Pollen Harvester”

Our senior project was to design a device for the Washington Department of Natural Resources to harvest pollen from trees more efficiently. This device takes trimmed tree ends and tumbles them to harvest pollen. After much design work, we settled on our final design and moved to prototype manufacturing. During the processes of designing and prototyping, many roadblocks were overcome to generate the best pollen harvester inside of the given project constraints.

Justus Konwent, Kaylah Tibbits, Mary Brownell, “Senior design presentation from the Iso's”

Three students collaborated to form a team as a component of their Capstone project. They were tasked with designing an Isothermal Water tank for the Hal and Inge Marcus School of Engineering (HIMSE). This project aims to enhance the educational and research opportunities available to Saint Martin's University engineering students. The team initially created numerous drawings of potential designs for the Isothermal Water tank. After careful consideration, they determined that a closed system containing a 12-gallon bucket connected to an evaporator kit would be the most suitable solution to maintain the steady-state temperature of the water within the tank. The team is scheduled to commence the building process of the Isothermal Water tank in the Spring semester. Armfield is sponsoring the team for the necessary materials and equipment, with additional items acquired from Home Depot and a 500-dollar fund from the HIMSE department. The team will collect data throughout the process to identify whether further modifications are necessary.

Riley Phelps, Steven Araki, Stephen Norby, “Hydraulic Damper for Pulsation Reduction”

This abstract presents the development and evaluation of a hydraulic damper for pulsation reduction. The objective of this project was to design and implement a damper system that effectively reduces pulsations in hydraulic systems, improving operating efficiency and reducing wear and tear on system components. The project implemented a combination of theoretical analysis, computer simulations, and experimental testing to achieve the desired objectives.

Computer Science: Dr. Radana Dvorak

Nadaa Elbarbary, Kriizia Marie Ragotero, Garrett Orwig, Hayden Jones, “Smart IoT Hidden Device Detector”

Our project outlines a Smart IoT Hidden Device Detector (SIHDD) powered by a Raspberry Pi, designed for detecting hidden cameras in various settings. Through cloud computing and machine learning techniques, the device ensures real-time monitoring and alerts, enhancing privacy security measures. Its integration with IoT enables connectivity and remote management. Experimental validation confirms its efficacy in identifying concealed surveillance devices, signaling its potential for widespread adoption in safeguarding privacy in both public and private spaces.

Karla Soto, Om Tada, Andrew Shulz, Octavio Moran, “Local Like You”

The Local Like You App innovates employee benefits by digitizing traditional discounts, streamlining processes for all stakeholders. It offers real-time updates and a user-friendly interface, seamlessly integrating with Harbor Foods' systems for efficient discount management. This abstract emphasizes the app's simplicity and effectiveness in enhancing employee satisfaction and operational efficiency.

School of Business

Accounting: John Craighill

Grace Brenner, Reine Albite, Kaylee Florek, "Palm Tree Resorts Case Study"

This case study explores the internal audit engagement undertaken by Palm Tree Resorts Limited to assess its central reservation system, HR, and payroll processes. Specific application controls, controlled processing techniques, sampling methodologies, and audit findings are thoroughly examined. The study identifies discrepancies in reservation tariff rates and proposes recommendations for improvement. Overall, the audit aims to enhance operational efficiency, accuracy, and compliance within the organization's critical systems and processes.

Business Administration: Dr. David Slotwinski

Jera Roller, Cole Hatton, Elizandrea Tuatoo, "BA499- Glo-Bus corporate simulation. Team Dual Dynamics"

In Business Strategy (BA499) taught by David Slotwinski, we learn what it takes to run a company. Through the Glo-Bus simulation we enter decisions to better our Drone and Action camera sales all while competing in an industry filled with our peers. The competitive nature of the simulation teaches us very valuable lessons about how to properly create strategies to stay competitive in the market.

Scholars Day Poster Presentations

Cebula Hall, 3rd Floor (1-3pm)

Dr. Shandeigh Berry, Nursing

Fadk Alam, "Integrating Mind-body Techniques in New Graduate Nurses"

Bethany Calaycay, "Improving Thermoregulation in Premature Neonates"

Gabriella Forbes, "Decreasing Secondary Traumatic Stress in Emergency Department Nurses"

Alyssa Gaskill, "Interventions to Manage Workplace Violence Against New Graduate Nurses"

Alie Horton, "Postpartum Suicide Prevention"

Kelene Mandefro, "Decreasing Gossip Related Violation to Improve Pediatric Patient Confidentiality"

Malia Paulsen, "Enhancing End-of-Life Communication Using the COMFORT Model"

Dr. Dianne Nauer

Joy Bamford, "Implementing Doula Care for Women of Color to improve pregnancy outcomes."

Emily Fisher, "Nutrition Impacting Skin Integrity in People With Diabetes"

Emily Fuller, "Chewing Gum Against Post-operative Ileus (POI)"

Kimberly Melton, "Virtual Reality to Decrease Pain and Anxiety During Pediatric IV Placements"

Rehea Monroy, "How diet affects Alzheimer's Dementia"

Elaina Pyke, "Nursing Intervention to Alleviate Anxiety Among Undergraduate Nursing Students."

Tabitha Tucker, "Promoting Kangaroo Mother Care (KMC) Utilization in the NICU: A Nurse-Led Approach"

Alicia Wasson, "Nurse-led patient education to reduce heart failure readmissions"

Feliciamonic Yelladay, Identifying and Decreasing Burnout in Informal Caregivers"

Dr. Hunhui Oh, Social Work

Paydrick Adams, "Recidivism and Reentry"

Destiny Conerly, "Empowering the Athlete Mind: Addressing Mental Health Challenges and Solutions for Collegiate Athletes"

Laia Currius, "Cross-Cultural Gender Perception Using the Five-Factor Model of Personality"

Fe Flores, "Resource Deprivation Among Single Fathers: A Social Justice Perspective"

Imahni Hawkins, "The Effect of Housing Instability on Low-Income Black Adults Residing in Urban Neighborhoods in the Pacific Northwest"

Nurgazy Kaipov, "Depression Among Male Veterans"

Brandi Kight, "The Effects of Intergenerational Trauma on Families"

Austine LeBlanc, "Identity in the Pacific Northwest"

Medi Mbuyu, "Justice for survivors: Be aware, Stay Aware."

Vanessa Villa Cervantes, "The Impact of Catholicism in Regards to Mental Health for Latinx People With Implications For Future Research"

Cassidy Walchak-Sloan, "Impact of Privilege on Victimization"

Dr. Jennifer Thomas, Nursing

- Staci Barnes**, "Mindfulness-based Intervention To Improve Mental Health In Teens."
Betsy Francisco Cervantes, "Perineal Massage in Prevention of Perineal Tears"
Bernard Mariano, "Implementing Mindfulness-Based Interventions in Pediatric ICU Nurses to Combat Compassion Fatigue"
Sheyenne Martin, "Health Coaching for Diabetes Self-Management"
Amaya Paulsen, "Implementing Music Therapy to Reduce Agitation"
Alyssa Twogood, "Using Aromatherapy for Pain Management in Labor and Delivery"

Dr. Linda Trader, Nursing

- Peter Abongo**, "Post-Traumatic Stress Disorder (PTSD) in Emergency Department (ED) Nurses"
Jina Evans, "Light Therapy to Improve Sleep Hygiene in the ICU."
Kaylei Kovacs, "Decreasing psychiatric readmissions with nurse-led motivational interviewing."
Keely Layne, "Improving Intimate Partner Violence (IPV) Screening For Tricare Beneficiaries"
Bethany Renner, "Improving Substance Use Disorder Outcomes Using Trauma Informed Care"
Christina Robinson, "Animal therapy for older adults to lessen depression."
John Rodriguez, "Reducing errors in verbal orders"
Sheyenne Martin, "Diabetes in the older adult community"

Harned Hall 110 (1-3pm)

Dr. Radana Dvorak, Computer Science

- Kyal Huntley**, "Saint Martins Touring App"
Victor Phillips, "SARA (Student Assistant Response AI)"
Isaiah Simpson, "Military Officers Association of America"

Dr. Irina Gendelman, Communication Studies

- Lauryn Morris**, "Curiosity, Not Censorship: Keep Books Open to All"

Dr. Michelle Hudders, Nursing

- Emily Chong**, "Preventing Pneumonia in Post-stroke Dysphagic Patients"
Ellison Kephart, "Promoting Parent-Infant Bonding in the NICU"
Erin Luong, "The Mother's Voice on Reducing Post-operative Emergence Delirium"
Sprinkler Newmann-Godful, "Does Implementing the CEASE Bundle Decrease Alarm Fatigue in ICU Nurses?"
Elizabeth Rounis-Anderson, "Reducing Agitation in Patients with Dementia"
Vanessa Smoke, "Primiparous Postpartum Depression and its Impact on Infant Development"

Dr. Elizabeth Nutter, Nursing

Anelle Alvarez Cervantes, "Newborns weighing less than 2,000 g not receiving timely Hepatitis B vaccinations"

Jaden Carson, "Parental Bereavement Care Following the Expected Loss of a School Age Child"

Kesem Coggins, "Colorectal Cancer Screening Nonparticipation"

Jayne Sabo, "Labor Inductions and Bedspace Management"

Sara Sabra, "Management of Breakthrough Pain in Oncology Patients"

Noah Simons, "Using Birthing Balls to Reduce Labor Duration"

Special Presentations

3-3:45 p.m. | Cebula 3rd Floor | Scenes from *Tartuffe* by Molière |
Darrell Born and Kathleen McKain

Students in the Theater and World Languages Departments combine forces with the SMU CORE curriculum to put on a performance of Molière's French comedy *Tartuffe*.

Casandra England

Kevin Cabrera

Grace Spencer

Judiah Weekly

Alex Daugherty

Kyle Fish

Jose Martinez-Perez

Chloe Patris

Maria Anne Wesolowski

Miguel Gomez

Celine Winston

Elyse Smith

Ka'leese Alexander

Nicole Harris

2-3:30 p.m. | Cebula 2nd Floor | Zine Presentations from "Gender and Pop Culture" | Mc Erl Andres

The Bechdel Test allows viewers and scholars to assess movies' inclusivity of women through their portrayal of female characters. The simple test allows viewers to interpret films' gender dynamic through the presence or lack thereof of women and their contributions to the plot. The class' midterm paper encouraged them to analyze a film of their choice and create a zine to share their findings in an easy-to-read format fit for the popular culture.

Special Thanks to our Room Hosts

Dr. Patrick Cooper	Harned Hall 115
Dr. Robert Hauhart	Harned Hall 116
Dr. Kayla Blyman	Harned Hall 117
Dr. Arwyn Smalley	Harned Hall 210
Dr. Jeremy Newton	Harned Hall 212
Dr. Yunchen Tian	Harned Hall 214
Dr. David Slotwinski	Harned Hall 213
Dr. Linda Maier	Harned Hall 215

A Very Special Thanks to the following for their sponsorship and support:

The Office of the Provost, Ms. Suzanne Helmig and Mr. David Bocook

Scholars Day and Honors Convocation 2024

Scholars Day Presentations

1 - 3:50 p.m. | Harned Hall classrooms

Support Saint Martin's students as they present their scholarly or artistic work to the Saint Martin's community.

Concurrent Poster Session Event

1 - 3 p.m. | Cebula Hall 3rd Floor and Harned 110

Support Saint Martin's students as they share their work in an open and collaborative atmosphere.

Special Presentations

2-3:30 p.m. | Cebula 2nd Floor | Zine Presentations from "Gender and Pop Culture" | Mc Erl Andres

3-3:45 p.m. | Cebula 3rd Floor | Scenes from *Tartuffe* by Molière | Darrell Born and Kathleen McKain

Honors Convocation / Awards Ceremony

4 - 5:15 p.m. | Marcus Pavilion

Join us in the year-end celebration as the academic departments bestow special honors to students and the monks of Saint Martin's Abbey present the outstanding faculty and staff of the year award.