



MONMOUTH
UNIVERSITY

HONORS
SCHOOL

THE HONORS SCHOOL

RESEARCH
CONFERENCE

SPRING 2024

SPRING 2024

HONORS SCHOOL RESEARCH CONFERENCE SCHEDULE

FRIDAY, APRIL 19, 2024 - LIBRARY 101

Opening Remarks:

Jennifer Ross, Acting Dean of the Honors School

SESSION A: 8:20 AM - 9:25 AM

Rachel Ludwick, *Chemistry (Biochemistry)*

Juliette Tordjman, *Biology (Molecular Cell Physiology)*

Andrew Catapano, *Computer Science*

Alexia Cole, *Chemistry (Advanced Chemistry)*

Lyndsey Buren, *Medical Laboratory Science & Chemistry*

SESSION B: 9:30 AM- 10:35 AM

Taïphane Orange, *Political Science (International Relations)*

Emily Loscialpo, *Spanish (Communication/MSP)*

Brooke Tortorelli, *Music (Musical Theatre) & Mathematics(Statistics)*

Lenien Jamir, *Political Science (International Relations) & Sociology*

Kiefer Walsh, *Criminal Justice*

SESSION C: 10:40 AM -11:45 AM

Maria Fernanda Aguiluz, *Health Promotion (Fitness & Wellness)*

Aaila Arif, *Computer Science*

Adriana A. Zefutie, *Psychology*

Kendall Ward, *Political Science*

Natalie Hayden, *Medical Laboratory Science*

SESSION D: 11:50 AM- 12:55 PM

Gina Delia, *Health Studies (Health Science)*
Maggie Young, *Health Studies (Health Science)*
Shannon Buchheister, *Health Studies (Health Science)*
Madeline Woolley, *Health Studies (Health Science)*
Emma Rizzuto, *Psychology*

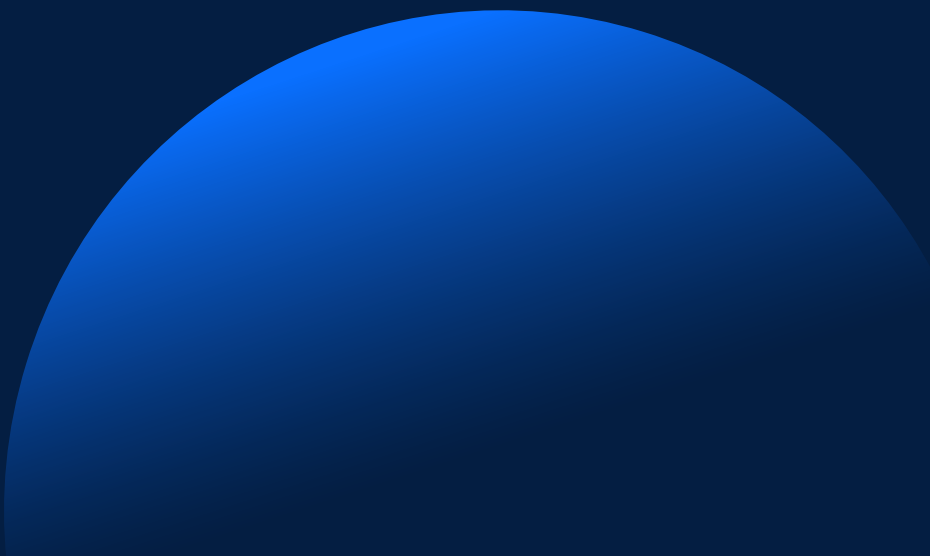
BREAK 1:00PM - 2:00PM

SESSION E: 2:05 PM - 3:10 PM

Alexander Mykulyn, *Political Science (International Relations)*
Julia R. Macey, *Psychology & Sociology*
Samantha McElhinney, *Marine & Environmental Biology & Policy*
Christopher Meehan, *Marine & Environmental Biology & Policy*
Jenna Farkas, *Business Administration (Operations, Supply Chain, and Data Management)*

SESSION F: 3:25 PM - 4:30PM

Emily Schopfer, *Art (Photography)*
Catherine Senatore, *Business Administration (Marketing)*
Estuar Calle, *Business Administration (Economics and Finance)*
Cecelia Lacovara, *Interdisciplinary Studies for Elementary Educators*
Alexander Phillips, *Design & Animation (Graphic/Interactive Design)*



THESIS ABSTRACTS

RACHEL LUDWICK | FIRST READER: DR. NIKITA BURROWS

Understanding Student Experiences in Flipped General Chemistry Courses Through the Lens of the Self-Determination Theory

The flipped classroom is a new educational model, growing in popularity, that has been implemented in schools across various levels and disciplines. This teaching method facilitates student engagement by leveraging pre-class learning to enable deeper exploration of concepts during dynamic, collaborative peer-to-peer in-class activities guided by instructors. While research on its cognitive benefits remains varied, consistent findings highlight a positive student experience. However, understanding the underlying reasons for this positive experience remains elusive. This study employs self-determination theory to examine how the fulfillment of autonomy, competence, and relatedness needs contributes to student experiences in flipped General Chemistry I and II courses at Monmouth University. Through semi-structured interviews and inductive coding, this research unveils the pivotal role of these psychological needs across pre-class, in-class, and post-class activities, shedding light on the mechanisms driving student satisfaction in this educational approach. These findings reveal the essential features of the flipped classroom model. Additionally, this study proposes new ways to evaluate the success of this model.

Analyzing the Effect of Bibliotherapy as an Alternative Form of Easily Accessible and Affordable Therapy

My library thesis focuses on bibliotherapy and the importance of its implementation as a more accessible and affordable form of therapy. Bibliotherapy refers to the use of literature and related mediums, like journaling, as a form of therapy. This topic is increasingly important because receiving treatment or help for mental health has gained a negative stigma, preventing individuals from seeking out much-needed therapy. Aside from the negative stigma attached to receiving mental health treatment, even those who seek therapy sometimes can't afford it or don't have accessible options. Bibliotherapy offers a more gentle approach that is cheaper than traditional forms of therapy as well as more accessible. Through the careful and thorough analysis of many research papers and journals, I delve into the ins and outs of bibliotherapy and its importance. My library thesis shows the effectiveness and value of offering bibliotherapy in various institutions like schools, libraries, prisons, and senior citizen homes. Hopefully, the use of bibliotherapy will progressively be implemented in a wide range of establishments that allow for attainable therapy for those who might not be able to access traditional forms of therapy elsewhere or don't have the means.

NPCs in Video Games: How Artificial Intelligence Shapes Gameplay Experiences

Artificial Intelligence (AI) continues to redefine the landscape of modern computer science, showcasing its transformative potential across various industries. Within the video game industry, AI stands as a pivotal force, shaping gameplay mechanics to create immersive experiences. This capstone aims to harness AI's capabilities within the context of game development by creating a game where the player squares off against AI-controlled Non-Player Characters (NPCs) that exhibit lifelike intelligence and decision-making. Utilizing Unreal Engine 5's advanced AI toolkit, including behavior trees, blackboards, and AI perception systems, NPCs dynamically respond to player actions and environmental stimuli, enhancing the player's immersion and gameplay experience. This capstone also aims to document the game development process through videos, screenshots, and written documentation. This documentation will help fill the gap in AI research in video games left by proprietary game code and provide a detailed overview of the systems and mechanics in play within the game world to other aspiring developers.

The Effect of Professor's Actions on Student's Depressive Symptoms

Depression is on the rise among undergraduates. With the negative effects on academics that come along with depressive symptoms, it is important to try to mitigate these effects. The way a professor teaches a course can impact depressive symptoms in students as well as the way a course is perceived. This study focuses on how professors' actions affect students' depressive symptoms, specifically through the professor's use of humor, their relationship to their students, student concentration and motivation, and feedback from professors. Major findings will be discussed.

Measurement and Determination of the Protein Composition of Beyond Raw Hydrolyzed Whey Protein Powder

This study tests the veracity of Beyond Raw's claim that their protein powder is a vegetarian protein alternative that provides athletes the freedom to remain vegetarian while able to consume protein. We tested the authenticity of Beyond Raw's claim that their protein powder indeed contains the seven major proteins that compose whey protein (WP). The cheesemaking process separates WP into a liquid that is an excellent source of high-quality protein. WPs are composed of beta-lactoglobulin (BLG), alpha-lactalbumin (ALA), bovine serum albumin (BSA), lactoperoxidase (LP), immunoglobulins, glycomacropeptide, and lactoferrin (LF), which can boost the immune system and minimize inflammation. WP extract is a great protein source for resistance-trained athletes due to its good supply of essential amino acids. We performed several biochemical analyses to identify different WPs present in Beyond Raw. Ion Exchange Chromatography (IEC) separated different proteins based on their charges, whereas the individual components were identified by SDS-PAGE and Western blot. The most abundant WPs present in Beyond Raw are ALA, BLG, and BSA. The study did not show any conclusive evidence for LP and LF, which is due to inconclusive results from the IEC. The study's overall findings do not confirm Beyond Raw's nutritional claim.

Too Young to Say I do

Child marriage is defined as marriage before age 18, the legal age of marriage in many countries. According to the United Nations, child marriage violates human rights, denies children the full opportunity and their right to education, impacts their long-term health, makes them vulnerable to intimate partner and domestic violence, and robs them of their childhood experiences that lead to becoming healthy adults. The UN Convention for the Elimination of Discrimination Against Women (CEDAW), ratified by under 200 member states, seeks to set the standards and norms about child marriage and combat violence against women. This paper focuses on the laws regarding child marriage and offers a comparative assessment of child marriage in the United States, Niger, and Brazil. These three countries vary in cultural and historical experiences, yet they all have high incidences of child marriage. The study will also examine the impact of child marriage at the individual and community levels from an economic, psychological, health, and socio-cultural perspective. Finally, it will reflect on how the COVID-19 pandemic has affected child marriage in these countries.

Misa Spanglish: Music & Worship Beyond Borders

Misa Spanglish utilizes sources in the fields of translation, bilingualism, Catholic legacy, and cultural worship trends to compose a musical setting of the Catholic Mass text that blends the Spanish and English translations of the texts. This work unites cultures and linguistic traditions in terms of its text, its musical style, and its theoretical impact on the communities it can be performed in. By first understanding prior cultural works and the text in each language, I was able to combine these sources and utilize knowledge of music theory to compose a bilingual setting of the Mass text to be performed by a small musical ensemble. Many parishes in the United States with Hispanic populations divide their Mass times into Spanish and English, causing a separation among not only parishioners of different cultural backgrounds, but among families of multigenerational immigrants as well, given differences in Spanish and English fluency between generations. By utilizing this Spanglish composition, communities can come together without borders, and unite under the common desire to worship.

Being Your Authentic Self: How Studying the Performing Arts in College Fosters Student Creativity through Artistic Opportunities

This meta data analysis highlights the effects of studying performance at the undergraduate level. Specifically, it focuses on the influence of performance education on the development of a well-rounded artist. The question – How does studying music in college encourage students to initiate their own performances and convey their authentic selves through and within their art? – provided direction for this examination. The literature highlighted themes such as improvement in performance capabilities, creation of performance opportunities, and authenticity in artistry. A thorough education in the arts emphasizes all that it takes to be successful, which can allow students to obtain a holistic approach to performing. Through the acquisition of knowledge, the developing performer gains confidence. Gaining control over one's artistry can reduce performance anxiety and result in nuanced performances, dynamically and emotionally. This research culminated in a performance that I wrote, directed, produced, and performed, entitled *And the Brooke Will Flow*. I initiated this monologue-driven theatrical experience that described my journey in college from ages eighteen to twenty-two and featured four actors who are Music and Theatre Arts students. This performance was a creative endeavor that featured authentic performances not only from myself, but also from the other actors.

Measuring What Matters: A Proposal for a Multi-Dimensional Index of Progress and Success

This paper explores the limitations of Gross Domestic Product (GDP) as an indicator of a country's success and proposes a new comprehensive index that considers social, environmental, and health factors. GDP's shortcomings are highlighted, and it is argued that non-economic factors, such as income inequality, environmental degradation, and social well-being, significantly affect a nation's prosperity. To combat this, a new index is created which draws on various well-being measures, including the World Happiness Index, Human Development Index, Social Progress Index, and Sustainable Development Goals rankings, to provide a more accurate and holistic view of a country's prosperity. Case studies of Costa Rica, New Zealand, and Israel are used to emphasize the importance of a comprehensive approach to measuring progress and development. The new index can serve as a valuable tool for policymakers and stakeholders to assess a country's prosperity and identify areas for improvement in meaningful ways.

Murder and the Macabre: A Criminal Justice Podcast

For my Creative Capstone Project, I chose to write, record, and publish my own interpretation of a “true crime” podcast, a recent phenomenon that has taken the entertainment world by storm. I chose this particular project because as a criminal justice major, I am constantly learning more and more about real life crimes and little known details about some of the world’s most famous cases, trials, and unsolved crimes. However, instead of pouring this passion into a thesis or a research paper, I chose to unite it with another passion of mine: the entertainment world. As a fan of true crime podcasts myself, I wanted to create my own interpretation of this fast-growing phenomenon that could uniquely combine my experience and education as a criminal justice major with my personality and public speaking abilities. Using the facilities located right here at Monmouth University, I was able to personally write, record, and publish my work to Spotify for the public to enjoy. Over the course of this project, I was able to further develop my skills as a researcher, as well as take introductory steps towards understanding the psychology of true crime podcasts and the infatuation people have with them.

Brain Train - A Mobile App for Assessing Performance Anxiety within Collegiate Athletes

Performance anxiety negatively impacts athletes by triggering adverse psychological responses toward competition in their sport. This anxiety arises from external and internal factors, inducing physiological reactions that affect athletes’ ability to perform optimally. Athletes may experience performance anxiety before or during competition, resulting in a discrepancy between the athlete’s capacity and skills during a game and practice. Exploring performance anxiety within collegiate athletics is fundamental as it can be a pivotal factor in whether an athlete will reach their full potential at the collegiate level; failure to reach this can result in frustration, development of mental illness, and retirement from their sport. Assessing performance anxiety’s impact within team and individual sports can aid psychologists in developing tailored coping strategies for specific sports. This proposal aims to integrate existing coping mechanisms and literature to develop a mobile application that helps sports psychologists comprehensively assess performance anxiety within collegiate athletics. This project aims to facilitate monitoring and dialogue between student-athletes and sports psychologists through a mobile app to easily document and evaluate what triggers performance anxiety within specific athletes and their teams, ultimately leading to mental health support and well-being.

Reinforcement Learning for Optimizing Delivery Paths Within Hospital Settings

This capstone investigates the optimization of resource delivery operations within simulated hospital environments through the application of reinforcement learning (RL) and Q-learning algorithms. By iteratively adjusting parameters, and introducing hallways and obstacles, the research effectively constructs a complex hospital environment tailored for agent navigation. The project aims to address the challenge of inefficient resource delivery in hospital settings, which can impact patient care and operational effectiveness. Methodologically, Python and OpenAI's Gym Library are utilized to create a dynamic virtual hospital floor, facilitating agent training and navigation. Reinforcement Learning (RL) teaches autonomous agents to interact with their environment by learning from experience, enabling them to make decisions through iterative processes of exploration and trial-and-error to maximize cumulative rewards. Q-learning, a specific RL technique, estimates the long-term value of actions in given states. A major finding is the successful adaptation of RL frameworks to accommodate diverse hospital layouts in the program, thereby facilitating efficient task execution. The conclusion underscores the significance of this work in advancing healthcare robotics, emphasizing the potential of RL methodologies to revolutionize hospital logistics and improve patient care outcomes.

College Connections Through COVID-19

The present study sought to examine how the onset of the pandemic affected college juniors' and seniors' ability to connect socially with peers, family, and faculty. Through the use of semi-structured and online interviews in Spring of 2024, following Consensual Qualitative Research (CQR) protocol, the researcher was able to gain an understanding of the lived experiences of students who entered college during COVID-19. The three main tenets to this study included deciphering how students established, maintained, or faced challenges with social connections their first year. Using CQR, the researcher analyzed interview transcripts with multiple individuals and developed a consensus on how the pandemic ultimately impacted college students. Keywords: social connection, pandemic, college seniors, college faculty, disconnection

How Does the Family Influence the Political Socialization of Youth?

This thesis explores the intricate intersection of political socialization and the effect of familial influence. By unpacking the socialization process, showcasing the existence of familial socialization in other areas, and then comparing this evidence to the topic at hand, this thesis allows for a rich synthesis of existing material to reach potential conclusions about how individuals form their political preferences. In looking at parental influence on academic performance and political engagement, a connection is established between parental influence and the development of young minds. By also exploring the phenomenon of low voting numbers in modern-day Western democracies through existing literature, the intersection of familial influence and early voter habits is assessed while factoring in socioeconomic and demographic considerations. Through this synthesis of information, this thesis contributes to the theoretical discussion of what forms our political identity and how parental behavior impacts the political interest of their offspring.

Examining the Relationship between Asthma Medication Adherence, GPA, and Health-related Quality of Life in College Asthmatics

According to the Centers for Disease Control and Prevention (2021) half of patients in the United States stopped taking their asthma medications within one year of being prescribed. This failure to adhere to a treatment regimen causes poor health outcomes. Medication adherence is particularly an issue for asthmatics due to the nature of daily dosing for long-term maintenance medication. There is limited research on the issue, specifically for college students. Additionally, medication non-adherence has been linked to poor grade point performance in college students with other chronic illnesses such as Diabetes Mellitus (Taylor, et. al, 2003). Thus, this quantitative study aims to determine how grade point average (GPA) is correlated to asthma control and HRQoL in college asthmatics. Data were collected through an online survey. To be included in the analysis, participants (n=59) had to indicate they had asthma and were enrolled in a college or university. Participants had a mean GPA of 3.46, 43.9% reported well-controlled asthma, and less than 29% reported an excellent HRQoL. Findings suggest that GPA and adherence have a positive association ($r = 0.388$, $p < .001$). The other variables, including HRQoL, did not have significant relationships. The correlation between GPA and asthma medication adherence could provide clinical significance regarding factors influencing adherence for asthmatics, and other chronic illness communities. To avoid the worsening disease and increased health care costs, colleges could target asthmatics with lower academic achievement for adherence interventions.

Clinicians' Thoughts and Experiences Using Video Games in Therapy

As 21st century media has been increasing in abundance in users, video games have been an upcoming and prominent resource for some speech-language pathologists to incorporate in their speech-language therapy. Through examining previously published works of literature and collecting real life data from speech-language pathologists, this presentation will analyze the usage and effectiveness of video games in speech-language therapy. It is hypothesized that when speech-language pathologists incorporate video games into their therapy sessions for some children, those children might become more engaged during that play, promoting a greater therapeutic outcome.

This research will discuss the various viewpoints from speech-language pathologists who include or do not include video games in their therapeutic work with their clients. The major conclusion expected to find through real-life data is to show how video games can be an important therapeutic tool in speech-language therapy for some clients, examining the impacts it can have on different speech-language disorders given the preexisting interventions.

Addressing the Causes of the United States' Rising Maternal Mortality Rate

Even as one of the most technologically advanced countries in healthcare, the United States is facing a maternal health crisis. The number of women dying from pregnancy-related complications continues to rise annually (Katella, 2023). Roughly two out of three of these deaths are preventable; research demonstrates that racial disparities account for a large portion of the increasing maternal mortality rate (Simpson, 2021).

Data was examined to distinguish and analyze variables that contribute to the rising maternal mortality rate and its disproportionate effect on black women. The research documents the robust changes that healthcare systems must enact to lessen racial disparities, saving the lives of women and children. Additionally, the social determinants of health, low health literacy, and lack of access to education were found to be important contributors to the high rates. Nonetheless, self-education can be a powerful and effective tool to decrease the likelihood of an adverse pregnancy and raise awareness. The gathered data is presented in two pamphlets --a patient-centered pamphlet and a provider-centered pamphlet-- to publicize information and resources that women can apply to understand the issue, analyze their situations, advocate for themselves, and overall, better their healthcare experience.

Implementation of ACL Injury Prevention Programs in Collegiate Athletic Programs Across the state of New Jersey

With drastic increases in female participation in organized sports in recent decades, injury rates for these athletes have increased dramatically as well. The anterior cruciate ligament (ACL) is a ligament in the knee that is a fundamental aspect in providing stability. Female collegiate athletes, especially in the sports of soccer, basketball, and lacrosse, have been found to tear their ACLs at a surprising rate in comparison to their male counterparts, falling between two to eight times more likely depending on the sport. To help control this increasing issue, Injury Prevention Programs (IPPs) have been developed to aid in correcting unbalanced lower extremity movements which prevent actions that frequently cause ACL injuries. IPPs have proven to be highly successful for those who utilize them by preventing ACL injuries by roughly 50%.

However, the popularity of ACL Injury Prevention Programs in collegiate athletic programs is widely unknown. The purpose of this study was to gain an understanding of how many collegiate programs implement these IPPs for their athletes, especially those at a heightened risk. A survey was sent to athletic trainers and strength and conditioning coaches at Division I, II, and III athletic programs across the state of New Jersey to see if they utilize any IPPs. Unfortunately, responses were only received from 9 of the 49 individuals it was sent to. From the results received, 5 programs had IPPs implemented while 4 did not.

The Affects of Green Spaces in Urban Areas

Green spaces can be found all over, yet in urban areas they are scarce. Not only is being outside an important part of upholding a healthy physical life, being outside can also promote wellness in other areas of life. Things like one's mental health, the feeling of inclusion, and a healthy social life are just some of the benefits of being outside. Despite these benefits, urban areas seem to lack the desire to promote the presence of green spaces. This is important because underlying issues such as socioeconomic status, gender, race, and a lack of safety are often the cause of various issues. The research presented can be credited through scholarly sources and text. With careful consideration one can understand the importance of green spaces in urban areas. Ultimately the research points to a decrease in major illnesses, such as heart disease and diabetes, and promotes a lifestyle that creates longevity in one's life.

Using Video Games in Stuttering Therapy: Perceptions of Practicing Speech-Language Pathologists

Stuttering is a communication difficulty characterized by disfluencies in the process of speech production. Although it is a physical communication issue, individuals who stutter also experience a multitude of social and emotional effects, including anxiety and feelings of isolation. Video games are a form of interactive digital media that have become increasingly popular in today's age. Furthermore, games for health are specifically designed for use in educational and therapeutic settings. When clients see themselves in a video game character, it provides a sense of comfort and inspiration. While playing, individuals may be able to relate to the characters and apply their own experiences to those within the game. Through this study, we provided practicing speech-language pathologists with the opportunity to play a video game specifically designed for use with clients in speech therapy: Jump Rogi, developed by Dr. Raj. Participants were then surveyed about the game's effectiveness for their clients who stutter. Armed with the knowledge of how Jump Rogi, and games for health in general, can be incorporated into a therapeutic setting, these clinicians can now connect with a broader range of individuals and better serve the emotional needs of their clients who stutter.

Food Waste Valorization

Food waste accounts for twenty-four percent of the waste that is sent to landfills in the United States each year. When food waste breaks down in landfills, it produces methane contributing to landfills being the third largest emitters of methane in the United States. The key to keeping food waste out of landfills is connecting food waste producers with valorization facilities. Microhaulers, private small-scale compost pick-up services, have closed some of this gap. Largely, they connect households with composters for a fee.

After compiling an in-depth literature review of food waste valorization methods, this thesis turned into a creative capstone focusing on providing software infrastructure to existing compost microhaulers. The outcome was a business proposal for a microhauler software provider. Unique capabilities within the proposal are a micro hauler locator, connections to unique food waste producers like Lomi and commercial food waste dehydrators, and compost cashback.

By creating a national framework of compost microhaulers, the public can divert more food waste away from landfills while simultaneously creating a value-added product, compost.

Contemporary Social Movements and the Critique of Capitalism: A Comparative Analysis of Movement Framing and Outcomes

The current project uses a comparative case study design to analyze three social movement campaigns, named Occupy Wall Street, Black Lives Matter, and Starbucks Workers United, with the aim to help understand how activists' analysis and critique of capitalism impact different movements' framing, tactics, and outcomes. Critical theory and power elite perspectives orient the analysis. For each case, movement organizations' website contents were selected as the data sources to be analyzed. A content analysis method was utilized, with grounded theory technique guiding the data analysis approach. Major findings show that the campaigns have varying degrees of anti-capitalist framing, organization, and involvement with their target entities, which have unique impacts on their outcomes. For more explicit anti-capitalist framing, more formal organizational tactics and demands with more involvement with the campaign's target entity produce more demands met. Similarly, for more implicit anti-capitalist framing, structured tactics and demands utilizing outside influence to affect the campaign's target entity produce favorable outcomes. The study results suggest that social movements with anti-capitalist ideologies benefit from structure, formality, and collaboration with their target entity. Overall, this research adds to the limited sociological research comparing social movements with respect to capitalist ideologies.

The Importance of Mangrove Size and Ability to Support Biological Communities

There are not many current studies focused on the individual level for the function of mangroves in the environment, which is what this project has attempted to answer. The question of focus was to determine if the size of an individual mangrove affects its ability to support a biological community. This is an important question to figure out the nuances of due to the increasing pressures of climate change on today's ecosystems and the importance of the functions provided by mangroves. Individual mangroves were selected in Paige Creek, Deep Creek, and Plum Creek located on Cape Eleuthera, The Bahamas. Data was collected in January of 2023 and January of 2024. The sample size included 26 individual red mangroves (*Rhizophora mangle*). The stilts of each mangrove were measured to determine their individual volumes and then combined to calculate the total volume of the mangrove, which was then converted to biomass. To evaluate biological communities, observations were made of animal species found and seen either on the mangrove, on the ground surrounding the mangrove, or in the vicinity of the mangrove. The relationship between mangrove size in biomass and animal species richness provided a correlation coefficient of 0.7155, indicating a strong correlation. The results of this study suggest that larger mangroves support a higher diversity in their biological communities.

Eastern Box Turtle Habitat Preferences Amidst Urban Encroachment

Urbanization has resulted in the spread of suburban landscapes across the United States, and has had countless impacts on the environment, and the organisms that are found in these areas. Among the groups affected by urbanization, terrestrial turtles have arguably had the most challenges, with habitat loss, and road mortality, testing their ability to survive in suburbanized landscapes.

To understand how turtles make use of habitats that have been modified by humans, we undertook a study of the habitat selection of Eastern box turtles (*Terrapene carolina carolina*), at a local conservation area. Habitat selection is the ecological process where organisms preferentially choose habitats from options in their environment. We located turtles using radiotelemetry and then used quadrats to determine habitat features, including the canopy density, temperature, and distance to trees. A similar set of data was collected at a random location, to determine if the turtles were preferential in their habitat selection.

We will use the habitat data to better understand if turtles are using habitat features disproportionate to their availability. Turtles are among the most threatened taxa of vertebrates, and by learning more about their habitat needs we can ensure that common species, like the box turtle, remain common.

What Can Tesla Learn from NUMMI?

The New United Motor Manufacturing Inc. (NUMMI) revolutionized the way that Americans worked in car manufacturing plants. NUMMI brought new ideas and the "Toyota Way" of management to the United States in 1984 when the joint Toyota-GM plant opened in Fremont, California. NUMMI hired disgruntled, laid-off GM workers for the factory and made an environment that fostered independence and efficiency by using team structures, "Stop the Line" assembly style, the same pay rate for all hourly workers, and safer working environments. Today the factory that housed NUMMI is now owned by Tesla, where there are racial, environmental, safety, and sexual harassment issues. This project will educate the public through a website on the racial, environmental, safety, and sexual harassment issues of the Tesla plant in Fremont, California, and give Tesla suggestions from NUMMI on how to fix their issues. So far, there is very little research comparing the management styles of NUMMI and Tesla and what Tesla could learn from NUMMI management. This Capstone is one of the first to talk about Tesla and NUMMI together.

EMILY SCHOPFER | FIRST READER: PROFESSOR JOHN MORANO

Capturing Celebrities - Violations of Privacy and Damage to Reputations of Public Figures in the Entertainment Industry

My capstone asks why inhumane treatment of entertainers by the press occurs. My guiding question was 'Is the solution to this issue a legal one, an ethical one, both, or something else altogether?' This question grew to be multifaceted: if all journalism deserves equal freedoms, could this undermine the First Amendment, is this a few bad journalists, a corrupted field, or are journalists just fulfilling public desires? The importance of this project is that it addresses the questions – is all journalism created equal, and do we value freedom of press more than freedom to live privately without tarnished reputations? My methodology consisted of finding a variety of sources and then using selected ones as examples in my capstone artworks. I conclude that there are no obvious solutions, but acknowledging the existence of this problem, however, can be the first step towards remedying it. In simply asking, I found that the legal burden of proof and societal views of celebrities both are large factors in this issue, and if the solution is to start granting different protections to different forms of journalism, this may cause more issues than it solves.

CATHERINE SENATORE | FIRST READER: DR. MATTHEW HARMON

Social Media Marketing an Analysis of The New York Yankees

Most people are unaware of how much time and effort is put into marketing and production within the sports industry, especially in the growing world of social media. The purpose of my project is to educate people on the importance of social media marketing, and the impact it has on the team, The New York Yankees. By comparing five Instagram posts from the 2023 Yankees losing season to five posts promoting the upcoming 2024 Yankees season, I am able to show how impactful social media marketing is. Explaining the reason behind the posts shared, players highlighted, and how fan comments impact marketing will help people gain knowledge on the topic. Findings determine which tactics are beneficial and can generate the best fan reactions. Presenting the different media examples through a flier allows for a better understanding of why the marketing tactics are effective.

First Generation Business Students: Career Advancement and Economic Mobility

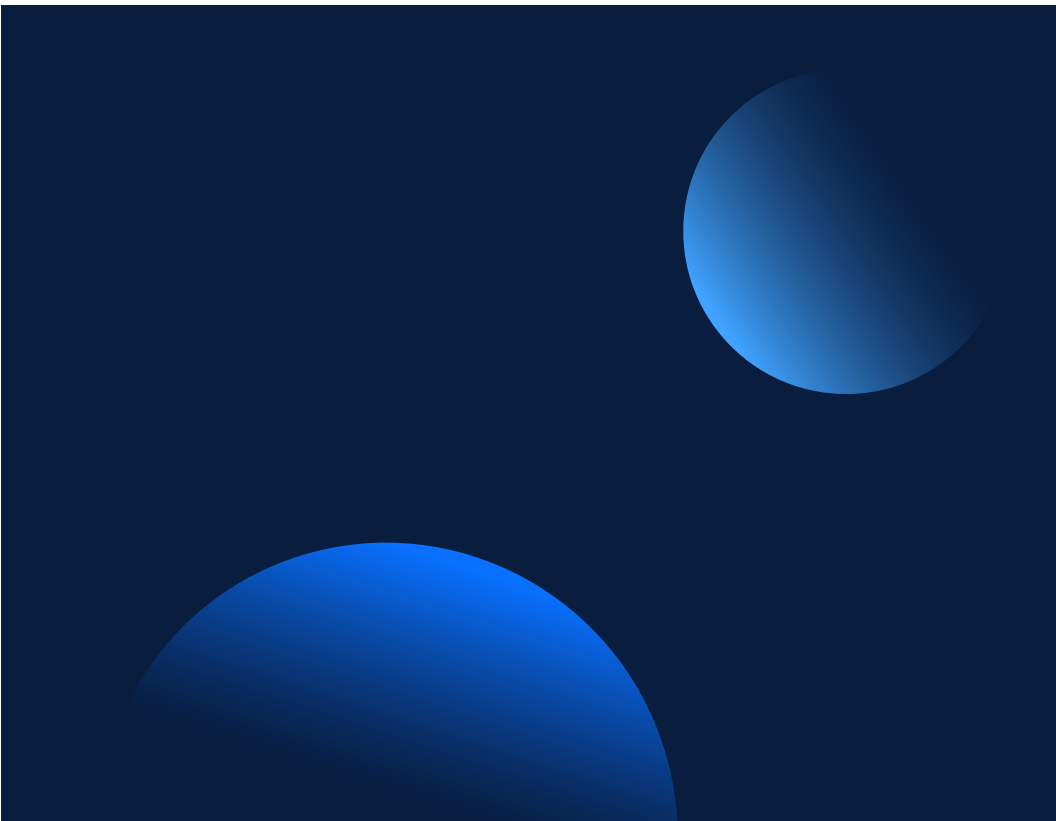
Many elements come with being a first generation student (FGS), but what are certain struggles and outcomes they have when entering the business field? The purpose of asking this question is to find the career advancement and economic mobility expectancy of first generation business students (FGBS) while seeing if aspects such as networking and the value of a degree can help. There are various studies about FGS and business students, but there are not many focusing on the students who fall into both categories. In the United States, there is an increase in FGS attending college and business is one of the most popular degrees for college students, therefore it is important to look at those students who are first generation business students. Many questions can be asked about FGBS, like their struggles, the positions these students desire, how they fair with the competitive nature of the business industry, and if they can succeed. The struggles FGS face during their time before college influence them to become business majors; this affects their college experience and business career. Looking at both sides of a FGBS can help see what problems exist for these students, who show disadvantages in the business field due to lack of connections and FGBS entering jobs below skill level.

Interdisciplinary Teaching Methods

The interdisciplinary teaching method provides elementary students with immersive and collaborative lessons that demonstrate interconnectedness between multiple academic disciplines. Interdisciplinary lessons can model real-life skills for students to adopt and use in their everyday lives, including ways that students can go about problem solving and relying on multiple resources for supports. This paper attempts to define the interdisciplinary teaching method, as well as other methods associated with the interdisciplinary method, and provide reasons for its use in the elementary classroom. Benefits of using the interdisciplinary method are outlined, as well as successful examples of the interdisciplinary method being implemented in elementary classroom settings. It is argued that the interdisciplinary teaching methods, including integrated and multidisciplinary methods, should be utilized in the elementary classroom on a regular basis to enhance student learning experiences and prepare students effectively for solving real-world problems. I created interdisciplinary learning segments across grade levels to show the interplay between New Jersey Student Learning Standards (NJSLS) and illustrate the teaching method's flexibility in allowing students to collaborate and learn life skills, all while studying the broad topic of diversity.

Boys Will Be Boys: A Visual Campaign on the Reformation of Modern Masculinity

The purpose of this capstone project is to reclaim the phrase “boys will be boys” to “boys support boys” as a term of endearment for positive mental health and a sense of understanding and progressiveness within young boys and adults. The internet is still an unrestricted goliath, and many boys who are still within their developmental stages or who are raised in a sheltered environment have been easily influenced by negative rhetoric from online speakers, which include racism, sexism, and xenophobia; much of this negative behavior may be excused by parents, using the aforementioned phrase as a means to disregard male behavior as “growing pains” assuming that they will simply mature on their own. My project focuses encouraging younger boys to not follow these destructive ideals and instead cultivate themselves and their community through social media posts, advertising, merchandising, and modern-day communications. This project aims to be contemporary and approachable for not only my target audience but for the greater American public.



OUR MISSION

The Honors School promotes transformative learning in a collaborative community of student leaders and faculty mentors both inside and outside of the classroom. Students challenge one another to maintain the highest standards in their own discipline and across all fields of interest. Student scholars in the Honors School are expected to develop a great depth of understanding within their field of study, while appreciating intellectual inquiry in a broad context. Participants in the Honors School raise students' cultural, ethical, and social awareness as they develop into well-rounded scholars and citizens of a global community.

PROGRAM DESIGN BY GINA DIGE