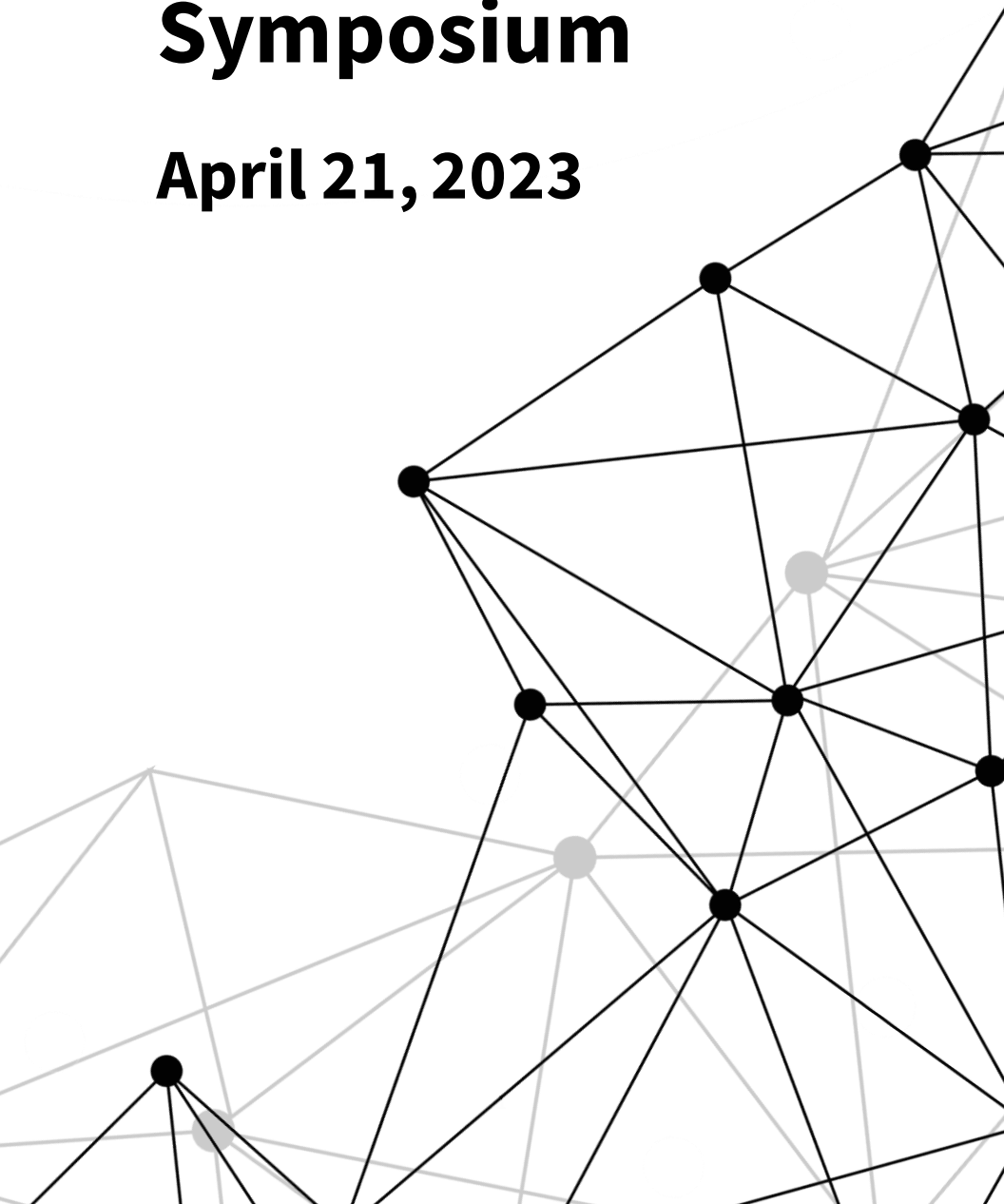


# Wittenberg Connections Symposium

**April 21, 2023**



# **Welcome to the 2023 Connections Symposium at Wittenberg University!**

The Connections Symposium is a time for us to recognize student achievement and highlight the many experiential learning opportunities throughout our campus and curriculum.

We are thrilled to be featuring presentations from more than 150 Wittenberg students in sessions throughout the afternoon of April 21. In the following pages, you can find a schedule of events and descriptions of each presentation.

Presentations will take place between 2:00 p.m. and 5:00 p.m. at several locations across campus. Thomas Library will host poster presentation sessions and offer some light refreshments. Musical performances will take place in the Post 95 Atrium in the Benham-Pence Student Center. Talks and panel discussions will be held in Shouplin 105A and 105B, Blair Hall 101, and Founders Pub. A map of these locations can be found on page 24.

A few additional events will take place on a separate schedule described on page 23, including the English Department Senior Symposium, which starts at 1:00 p.m., and the Senior Art Exhibition, which remains open for the next several weeks.

After the Connections Symposium sessions end at 5:00 p.m., we invite you to join us at the McClain Center for Diversity to enjoy music and food at the Concerned Black Students annual cookout.

Thank you for joining the Wittenberg community in celebrating the exciting work of our students.

## Schedule of Events by Presentation Number

	Post 95	Shouvlin 105A	Shouvlin 105B	Blair Hall 101	Library Atrium	Founders Pub
<b>2:00 to 2:50 p.m.</b> (pages 3–9)	1–4	7, 8, 9, 33	10, 11	12	13–29, 87	
<b>3:00 to 3:50 p.m.</b> (pages 10–16)	30	6, 32, 34, 35	36–38	39, 40	41–58	31
<b>4:00 to 4:50 p.m.</b> (pages 17–22)	59–62	63, 64	65	66, 67	68–86	

Want to let a presenter know they did a great job?

Share your anonymous feedback (or include your name if you like) and we will let them know!

**[bit.ly/WittCSfeedback](https://bit.ly/WittCSfeedback)**



Separately scheduled events (100–108) can be found on page 23, including the **English Department Senior Symposium** and the **Senior Art Exhibition**.

## 2:00 to 2:50 p.m. Sessions

**2:00 to 2:20 p.m.**

Post 95

**1. Villanelle, written by Paul Dukas (1865-1935)**

***Jeremy Watson***

Music performance

**2. Novellette Op. 21 No. 1, composed by Robert Schumann**

***Ana Ortega-Carreón***

Music performance

**3. Journey to the Past by Lynn Ahrens and Stephen**

***Flaherty***

***Harley Paul***

Music Performance

**2:30 to 2:50 p.m.**

Post 95

**4. Wittenberg University Percussion Ensemble**

***Olivia Clayton, Ana Ortega-Carreón, Jeremy Watson, Kenta Thompson, Gabriella Lillico, Avery Livingston, Max Benincasa; Director, Edward Dunlap***

Playing the following repertoire:

Akadinda Trio - Emmanuel Sejourne

Edge of the World - Nathan Daughtrey

The Winding River - Tom O'Connor

4/4 For Four - Anthony Cirone

Starfall - James Vilseck

### [Online Video](#)

**5. How Machine Learning Helps Us to Classify IMDB Movies**

***Hillary Humbaugh***

I will be giving an oral video presentation about working with a data set of 1000 movies from IMDB and information about them, such as their director, actors, and IMDB rating. Our goal is to develop a predictive model for IMDB-rated datasets in order to make predictions based on movie genres using our existing IMDB dataset.

# 2:00 to 2:50 p.m. Sessions

**2:00 to 2:50 p.m.**  
Shouvlin 105A

**Economics Senior Thesis Presentations - Session 1**  
**Session Chair: Dr. Gabriel Courey**

**7. Improving the Logistical Performance of a Country**  
***Austin Fickeisen***

Studied the relationship between Logistics Performance Index with multiple explanatory variables that were found to be economically significant and positively correlated using data from the World Bank.

**8. What Impact does Female Account Ownership have on Life Expectancy?**  
***Kirstin Hawkins-White***

I study the relationship between female financial account ownership and population life expectancy. After controlling for compulsory education, air pollution, and violent crime, I find that female account ownership is positively correlated with life expectancy.

**9. How a City's Public Transportation Impacts Unemployment**  
***Rider Stock***

I study the relationship between public transportation accessibility, measured by price and hours of operation, and unemployment. I use data from the largest fifty cities in the United States. I find that after controlling for population density, GDP per capita, average population age, educational attainment, and state political party control, accessibility to public transportation and unemployment are positively correlated.

**33. Inflation Rates and the Effect on Poverty**  
***William McDavid***

I use data from the World Bank to study the relationship between inflation and poverty rates. After controlling for net national income, current dollars in circulation within the nation, total tax revenue, and number of people who have been displaced by natural disasters or war, I find that inflation has a positive correlation with poverty rates.

## 2:00 to 2:50 p.m. Sessions

**2:00 to 2:20 p.m.**

Shouvlin 105B

### **10. Building Space for Underprivileged Kids**

***Owen McGuffey, Ashton Newton, Lucas Mattison***

Our submission is based off of a class project we completed at On the Rise Farm. At On the Rise, we built a new space for the kids to use their creativity, work on projects, and interact with one another.

**2:30 to 2:50 p.m.**

Shouvlin 105B

### **11. Ohio's Reproductive Laws: Medicine or Murder?**

***Kristina Withem***

This research paper is about the reproductive legislation in Ohio following the Dobbs vs Jackson Women's Health Organization decision. It discusses the history of reproductive rights, both sides of the debate, and the legislation within Ohio following this decision.

**2:00 to 2:50 p.m.**

Blair Hall 101

### **12. Tiger Ventures & Tiger Fuel**

***Conor O'Malley, Ian Ash***

Learn about Tiger Ventures and entrepreneurship at Wittenberg, and join us for a field trip to the HWA lobby to visit Tiger Fuel - a student-run power station providing smoothies, protein bars, coffee, and more.

## Poster Session 1

**2:00 to 2:50 p.m.**

Thomas Library

### **13. Relationship between Nature and Religion**

***Kyle Bechtol***

Exploring how ancient ideas about nature, religion and animals may have an impact on nature and the environment today.

**2:00 to 2:50 p.m.**

Thomas Library

### **14. Health Care Education and How it Affects Inhaler Technique**

***Peyton Isaac, Morgan Phillips, Elvis Casanova***

Does education by healthcare providers influence adults with asthma to correctly administer their inhalers? The goal of this research was to observe adults and how correct/incorrect inhaler use is influencing the effects of asthma.

## 2:00 to 2:50 p.m. Sessions

**2:00 to 2:50 p.m.**

Thomas Library

### **15. Concern for Female Collegiate Athletes' Risk for Eating Disorders**

***Lainee Valentine, Jessie Himes, Jacob Thiel***

Eating disorders are multi-faceted, showing no one significant determining factors, every different population have varying risk, but literature shows us there are identifiable risk. We see that women are more at risk for eating disorders in general, we also found that athletes also pose an elevated risk for eating disorders. Since, female student athletes fall in many different populations with definable risks, we see that they have multiple risk factors for developing eating disorder habits.

**2:00 to 2:50 p.m.**

Thomas Library

### **16. Correlation Between Habitual Natural Caffeine Consumption and Health in Middle Aged Adults.**

***Jenna Hallett, Tori Banks, Kelly Mamula***

In our study, habitual coffee consumption was found to have several positive effects on health for middle aged people. It assists with cognitive functions, improves mental health, regulates physical functions, and minimizes the risk of chronic diseases.

**2:00 to 2:50 p.m.**

Thomas Library

### **17. The Effects of Performance Anxiety on Student-Athletes**

***Grace Hehman, Edward Bolden, Taylor Weiss***

College athletes are often seen as being put on a pedestal for their athletic accomplishments. However, college student-athletes have a unique set of stressors and anxieties put on them which can cause their sports performance to be negatively impacted.

**2:00 to 2:50 p.m.**

Thomas Library

### **18. Career, Major Satisfaction and Effects of Stress**

***Morgan Pagel, Grace McLaughlin***

Stress in small doses tends to be a good thing, however when stress is constant it causes more harm than good. Our research shows that students who do not have a declared major tend to have more stress, a lower GPA, and overall, a worse mental health in comparison.

## 2:00 to 2:50 p.m. Sessions

**2:00 to 2:50 p.m.**

Thomas Library

### **19. Effect of Screen Time on Adolescents**

***Kylee Slone, Josie Baker, Audrey Ishimwe Simbi***

Are there differences in mental health perceptions between school age adolescents who have limited screen time versus those who have unrestricted access to social media? Homenet (Richards, Caldwell, and Go) reported that using the internet for as little as three hours a week increased levels of depression, anxiety, and reduced social support. The results showed teenagers to be the most vulnerable to these negative effects.

**2:00 to 2:50 p.m.**

Thomas Library

### **20. The Politics of Water in the West**

***Deza Frega, Hannah Hayes, Kaitlyn McGee, Jane Javorek, Carissa Schroede***

This is a presentation about our 2023 Fire Week trip, "The Politics of Water in the West." We'll discuss the politics of water use and some of the science behind water in Southern California.

**2:00 to 2:50 p.m.**

Thomas Library

### **21. Stream Flow Analysis in Buck Creek**

***Dawson Smith***

Measuring the flow rate of Buck Creek during high discharge events to determine what can be done to restore the bank along Ferncliff Cemetery road and to improve the health of the stream.

**2:00 to 2:50 p.m.**

Thomas Library

### **22. The Effect of Climate Change on Atmospheric Rivers**

***Jack Olenchek***

Atmospheric rivers stemming from the Pacific influence weather across North America and the Pacific Coast specifically. Climate change presents unique challenges in forecasting these storms and predicting how they may evolve in the future.

**2:00 to 2:50 p.m.**

Thomas Library

### **23. Comparing the impact of CO in the Cleveland area over a 29 year span.**

***Devland T. Culliver***

I have collected the accumulated amount of CO emitted in the Cleveland area at a specific site over a 29 year span. My goal with this study is to compare the amount of CO emissions over the years and their various potential impacts on the area and its population.



## 2:00 to 2:50 p.m. Sessions

**2:00 to 2:50 p.m.**

Thomas Library

**87. Springfield Soil Lead: Traffic Assessment**

***Meggie Suffoletta***

**2:00 to 2:50 p.m.**

Thomas Library

**24. Dark Personality Traits and True Crime Media Consumption Predict Criminal Justice Myth Endorsement**  
***McKayla Pickering***

In this study, participants completed measures of personality, true crime media consumption, and their belief of criminal justice myths. Narcissism, Machiavellianism, and true crime media consumption positively predict criminal justice myth endorsement.

**2:00 to 2:50 p.m.**

Thomas Library

**25. Politics and Social Media Marketing**

***Maren Raymond***

Political messaging intended to inform and persuade is prevalent on social media platforms. In this study, I tested how the presence of an image and the ease of reading affected responses to a political message on the topic of mandatory national service.

**2:00 to 2:50 p.m.**

Thomas Library

**26. Conceptualizing "Us" versus "Them": Comparing Buddhists, Christians, Hindus, and Muslims in the U.S. and India**

***Kyla Tuttle, Maria Rodriguez, Jaiden Newsome, Emily Malick, Chris Long, Michael Little, Emilio Gutierrez, Daivion Greene-Tucker, Cece Critchfield, Lea Blander***

High school religion instructors in the U.S. and India wrote short essays about what adolescents ought to learn about how to treat other people. This qualitative analysis highlights similarities and differences in how between-group relations are conceptualized by adherents of different religions.

## 2:00 to 2:50 p.m. Sessions

**2:00 to 2:50 p.m.**

Thomas Library

**27. Measuring Anxiety Levels in Socially Ranked Mice**

***Haley Eckhert, Daivion Greene-Tucker, Chris Long, PJ Meyers, Olivia Norbut, Maria Rodriguez, Gabby Stern, Grayson Timms, Kira van Ravensberg, Cassidy Webber***

Why We Chose This: We chose to present and display these specific tests because we have been working with mice for the past few weeks and have researched and completed many different experiments to evaluate anxiety and social dominance. The two tests we conducted were the elevated zero maze which measured anxiety levels by calculating the amount of time the mice spent in the open arms, and the social dominance tube test (SDTT) which measured the social rank among a group of three mice.

**2:00 to 2:50 p.m.**

Thomas Library

**28. Examining Social Dominance and Anxiety in Mice**

***Emily Malick, Annie Wethington, Tiffany Moss, Kyla Tuttle, McKenna Boling, Taylor Crawford***

We are looking at the sex differences of levels of anxiety in mice using elevated zero maze data.

**2:00 to 2:50 p.m.**

Thomas Library

**29. Electroencephalograph (EEG) Demonstration**

***Guille Del Rio Gonzalez, Michael Little, Alyson Parks, Eli Reed, Drew Sheldon, Malik Taylor***

A live demonstration/explanation of the function, history, and uses of the EEG using alpha waves and the P300 response as examples.

# 3:00 to 3:50 p.m. Sessions

**3:00 to 3:50 p.m.**

Post 95

## **30. Wittmen Crew Performance**

***Peyton Archer, Jackson Fite, Isaiah Brown, Kai Carroll, Cale Morrison, Jeremy Watson, Eddie Denny, Donovan Egelhoff, William Boeck, Seamus Dunphy (Alumni)***

The Wittmen Crew is the premiere all men's acapella group on campus. Founded in 1999, The Wittmen Crew have continued sharing high caliber music to this day.

**3:00 to 3:50 p.m.**

Founders Pub

## **31. Creative Writing Capstone Presentation**

***Zoe Hale***

**3:00 to 3:50 p.m.**

Shouplin 105A

## **Economics Senior Thesis Presentations - Session 2**

***Session Chair: Dr. Gabriel Courey***

### **6. The Effect of a Growing Population On Agricultural Land**

***Lane Johnson***

I study the correlation between population density and agricultural land as a share of total land. After controlling for population size, GDP per capita, population growth, and access to electricity, I find that population density and agricultural land are positively correlated for developed countries and the opposite for developing countries.

### **32. The Relationship between GDP per Capita and the Labor Force Participation Rate of Females With a Basic Education Level**

***Gabe Spiers***

I study the relationship between GDP per capita and the labor force participation rate of females with a basic education level. I use data from Worldbank and find that after controlling for LFPR of males with a basic education level, the real interest rate, the unemployment rate, the vulnerable employment rate, and a country's level of development, GDP per capita and the labor force participation rate of females with a basic education level are positively correlated.

### **34. The Relationship Between Foreign Portfolio Investment and Macroeconomic Factors**

***Maxwell Monachino***

My study aims to investigate how specific macroeconomic factors affect foreign portfolio investment. I use a regression analysis to examine the impact of various factors on foreign portfolio investment.

## 3:00 to 3:50 p.m. Sessions

### **35. International Trade and Education**

***Matt Moore***

I study the relationship between trade between countries and the amount of people being educated within those countries. I use data from World Bank to find correlation after controlling for inflation, gross domestic product, and interest rates.

**3:00 to 3:50pm**

Shouplin 105B

### **Women's Studies Senior Presentations**

***Panel Chair: Dr. Heather Wright, Assoc. Prof. of Political Science, Director of Women's Studies***

### **36. Is Queer Really so Queer?: Gender Ideologies Presented by a Group of Queer Friends**

***Abby Gerstenzang***

During this presentation we will examine the way gender ideologies are expressed in a group of queer friends by examining a transcript of naturally occurring conversation. We will investigate if queer friends will break gendered stereotypes, or if they will act in accordance with the gender ideologies they were exposed to since birth.

### **37. Mary Shelley: The Good, The Bad, The Ugly**

***Mackenzi Moorehead***

Mary Shelley had an eventful life that led to her becoming one of the most popular authors. She experienced love, lust, anger, heartbreak, and put those emotions into all of her books. This presentation is a deep dive into what went on in Mary Shelley's life to give her inspiration for the stories she wrote.

### **38. A Complex Web of Intersectionality: Gender, Race, Masculinity, and Anger in "Passing" and "Freedom" by Nella Larsen**

***Emily Malick***

Masculine anger is a theme that is carried through Nella Larsen's work. Larsen uses male characters in her fiction work to explore certain universalities of masculinity, including ones of anger and violence, and how these ideals are affected by the intersection of race.

## 3:00 to 3:50 p.m. Sessions

**3:00 to 3:20 p.m.**

Blair Hall 101

**39. Oil & War: An Economic Analysis of Gas Pricing**

**Alexander Newman**

Gas prices are a frequent topic of political concern. This study applies econometric modeling techniques to ascertain the degree to which gas pricing is sensitive to shifts in production and direct engagement in war.

**3:30 to 3:50 p.m.**

Blair Hall 101

**40. Religious Beliefs and Mental Health Perceptions**

**Harley Paul**

The purpose of this research is to investigate the attitudes and beliefs held by religious and non-religious groups about one another, and specifically looking at the beliefs related to mental health and mental health stigma.

## Poster Session 2

**3:00 to 3:50 p.m.**

Thomas Library

**41. Impacts of the 2021 and 2022 Active Learning in Organic Chemistry Workshops**

**Sarah Ruhe**

**3:00 to 3:50 p.m.**

Thomas Library

**42. Comparing methods for identifying polymers and microplastics**

**Caitlyn Shelton**

This research project compares the pros and cons of different analytical instruments and their effectiveness in identifying polymers. Also, this project studied the use of Nile Red to detect microplastics in samples.

**3:00 to 3:50 p.m.**

Thomas Library

**43. Finding Spotted Turtles in Southwest Ohio**

**Alexis Cruce, Neil Boyles**

We used visual assessment surveys and hoop traps to find and assess Spotted Turtle populations in local fens. Our surveys were conducted in the Fall and Spring where traps were left baited overnight for a period of days.

## 3:00 to 3:50 p.m. Sessions

**3:00 to 3:50 p.m.**

Thomas Library

**44. Tracking turtles; spotted turtle habitat use in southwest Ohio**

***Sarah White, Izabel Giglio***

Spotted turtles have been found in habitats that are at forest edges, are marshy and muddy, and oftentimes have a small creek and tall grass around. We have gathered the information that we are presenting and multiple local Clark county fens.

**3:00 to 3:50 p.m.**

Thomas Library

**45. How Environmental Education is Influenced by Hands-On Learning**

***Alexander Dye***

I will be reviewing my experience as a Naturalist intern for Greene County Parks and Trails and how this experience has shown me how kids learn and grow their knowledge in today's society.

**3:00 to 3:50 p.m.**

Thomas Library

**46. The evolution of Wildland Fire Management and the Value of Indigenous Knowledge**

***Olivia Lawrence***

A summary of my internship experience serving on a wildland fire crew and a comparative review of fire management techniques used by Indigenous groups as well as the United States government.

**3:00 to 3:50 p.m.**

Thomas Library

**47. Analyzing Resolution Qualities Between Multiple Flight Patterns when Mapping Alluvial Fan Deposits within the Avawatz Mountains, Mojave Desert, California, Using Structure-from-Motion Photogrammetry and Unmanned Aircraft Systems**

***Jaden Sarragua***

**3:00 to 3:50 p.m.**

Thomas Library

**48. Tasty Low Sodium Diets and Their Health Benefits**

***Mackenzie Kelley, Andrew McFeeters***

We created a low-sodium common food item that usually has sodium with less to no sodium. We did so by being able to have additives to have the food taste the same if not better. We then had a Nursing class be our taste testers for the food items. We had them both try the regular cookie and the cookie item with low-sodium/no sodium. With the main question being, "which cookie tasted better?"

## 3:00 to 3:50 p.m. Sessions

**3:00 to 3:50 p.m.**

Thomas Library

### **49. NCLEX 1st Time Pass Rate & ATI Comprehensive Predictor**

***Cadence Boyd***

Comparing NCLEX pass rates with performance on Comprehensive Predictors. There was a correlation between Comprehensive Predictor achievement and NCLEX pass rate on 1st attempt for graduates who did not pass. With the exception of 1 outlier who achieved >75% on the predictor, the 4 students who did not pass the 1st time were at 70% or lower.

**3:00 to 3:50 p.m.**

Thomas Library

### **50. The Effects of Improving Postpartum Education**

***Ally Miller, Reese Hartsaugh, Kyle Fout***

If prenatal education is provided about postpartum depression, will more women be willing to seek treatment? Around 1 in 7 women will experience postpartum depression. There have been many methods of prevention used to help with this number. We believe that the best way to prevent or help women affected by this is by providing education and breaking down the stigma

**3:00 to 3:50 p.m.**

Thomas Library

### **51. The Effects of Social Media on College Students**

***Grace Brownlee, Haleigh Willison, Thomas Thiel***

We will be talking about the effects of excessive social media use on college students and their mental health. Social media has a clear negative effect on the overall mental health of college students.

## 3:00 to 3:50 p.m. Sessions

**3:00 to 3:50 p.m.**

Thomas Library

### **52. Personality Stereotypes of Killers**

***Shania Stone***

My research investigates how stereotypes can bias how people may think (potentially in the criminal justice system) as it examines the different personality stereotypes of killers, such as serial killers, mass murderers, and those who commit involuntary manslaughter. True crime can indicate certain personality stereotypes as some types of media present facts of certain true crime stories, while other types dramatize the events or romanticize them, which can completely change a person's perspective and idea of certain killers.

**3:00 to 3:50 p.m.**

Thomas Library

### **53. Beliefs about the consequences of divorce on children of different ages**

***Amy Bidwill***

The divorce rate is at its highest, and people assume divorce has significant consequences for children, but we do not know at what age they believe children are affected the most. Therefore, a study was conducted to collect data on beliefs people have on the consequences of divorce for children of different ages.

**3:00 to 3:50 p.m.**

Thomas Library

### **54. Personality and Tattoos**

***Cassidy Webber***

Many people hold (negative) stereotypes on tattoos but there are many different types of tattoos. Therefore, I conducted research to see what different personality traits were associated with different tattoos.

**3:00 to 3:50 p.m.**

Thomas Library

### **55. Conceptualizing "Us" versus "Them": Comparing Buddhists, Christians, Hindus, and Muslims in the U.S. and India**

***Kyla Tuttle, Maria Rodriguez, Jaiden Newsome, Emily Malick, Chris Long, Michael Little, Emilio Gutierrez, Daivion Greene-Tucker, Cece Critchfield, Lea Blander***

High school religion instructors in the U.S. and India wrote short essays about what adolescents ought to learn about how to treat other people. This qualitative analysis highlights similarities and differences in how between-group relations are conceptualized by adherents of different religions.



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***Emily Malick, Annie Wethington, Tiffany Moss, Kyla Tuttle, McKenna Boling, Taylor Crawford***

We are looking at the sex differences of levels of anxiety in mice using elevated zero maze data.

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### **58. Electroencephalograph (EEG) Demonstration**

***Guille Del Rio Gonzalez, Michael Little, Alyson Parks, Eli Reed, Drew Sheldon, Malik Taylor***

A live demonstration/explanation of the function, history, and uses of the EEG using alpha waves and the P300 response as examples.

## 4:00 to 4:50 p.m. Sessions

**4:00 to 4:50 p.m.**

Post 95

**59. Into The Night - Clara Edwards; Far From the Home I Love - Fiddler on the Roof**  
*Sophia Thompson*

**60. "Si mes Vers avient des ailes" by Reynaldo Hahn, "Bel Piacere" by G. F. Handel, & "Your Daddy's Son" by Stephen Flaherty**  
*Gabby Baker*

Music Performance

**61. If I Can't Love Her**  
*Brayden Wilson*

Vocal performance

**62. Les Berceaux by Gabriel Fauré; Lasciatemi morire by Claudio Monteverdi; Into the Night by Clara Edwards**  
*Abigail Anderson*

Vocal Performance

**4:00 to 4:50 p.m.**

Shouvin 105A

**63. This Talk is Bullshit**  
*Haley Eckhart*

A discussion on the components of bullshit and narcissism. Reports the results of a study demonstrating the relationships between these constructs.

**64. The impact of simulated nitric (HNO<sub>3</sub>) and sulfuric (H<sub>2</sub>SO<sub>4</sub>) acid precipitation on five North American dandelion (*Taraxacum officinale*) growth characteristics**  
*Julianna Fisher*

Acid precipitation is a prevailing environmental problem caused by many man-made and naturally occurring processes. Growth characteristics of the North American dandelion (*Taraxacum officinale*) were analyzed after 6 weeks of exposure to either distilled water, simulated rainwater (pH 5.6) or simulated nitric, sulfuric, and hydrochloric acid rain at pH 4.4 and 4.2.

## 4:00 to 4:50 p.m. Sessions

**4:00 to 4:50 p.m.**

Shouvlin 105B

### **65. Sociology Research Methods Presentations**

**Brett Bibb, Kody Gould, Corin Turkovich, Logan Vachon, Noah Grooms, Alyson Parks, Daveonna Moss, Maddie Williams, Katherine Petersen, John Banks, McKayla Pickering, McKenzie Crosbie, moderator: Dr. Chad J. Sloss**

This is a collection of individual student work and the development towards potential capstone projects for students enrolled in Spring 2023 Research Methods.

**4:00 to 4:20 p.m.**

Blair Hall 101

### **66. Policing in the New Era: Representation and Its Effects on Traffic Stop Outcomes**

**Lucas Hummel**

The theory of representative bureaucracy holds that a more diverse bureaucracy will net more positive public contact and policy outcomes, especially among street-level bureaucrats like federal aid workers and law enforcement officers (LEOs). Utilizing data from the 2020 Police-Public Contact Survey (PPCS), "Policing in the New Era" tests this theory as it relates to traffic stop outcomes and the demographic representativeness of the LEOs involved.

**4:30 to 4:50 p.m.**

Blair Hall 101

### **67. A Semester in Washington D.C.**

**Madeline Diechman**

An overview of the benefits of the LCWS program that Wittenberg offers. Looking at the work done at my internship as well as the experience just being in our nation's capital and all it has to offer.

## 4:00 to 4:50 p.m. Sessions

### Poster Session 3

**4:00 to 4:50 p.m.**

Thomas Library

#### **68. Religion & Medicine**

***Haley Pitman***

Ancient societies viewed the human anatomy in a much different sense than we do today because of the cultural influences of the time with little knowledge of the complexities associated with it. External influences were also greatly rooted in the religious beliefs within the community.

**4:00 to 4:50 p.m.**

Thomas Library

#### **69. "Light on the Great Lakes" FIRE Week Trip to Michigan**

***Emma Gearhart, Paige Jackson***

During FIRE Week, Dr. Gabriel Courey and 8 students traveled to West Michigan to learn about shipwrecks and lighthouses. This poster presentation recounts the highlights including visits to museums, lighthouses, sand dunes and the site of a buried city.

**4:00 to 4:50 p.m.**

Thomas Library

#### **70. Business & Religion**

***Ally White***

I have conducted qualitative research with Dr. Sunny Jeong through interviews to raise question about how business practices may be affected by culture or religion.

**4:00 to 4:50 p.m.**

Thomas Library

#### **71. College students consumption of caffeine and stress levels**

***Rachel Bloom, Sophia Grossman, Emma Reeder***

PICO question: How does the amount of caffeine intake affect stress levels in College Students?

**4:00 to 4:50 p.m.**

Thomas Library

#### **72. The Effects of Diet and Nutrition on College Students**

***Harry Hamlin, Addeanna Tedros, Emi Rosenberg***

Our research and presentation honed in on the effect of diet, nutrition, and obesity on college students. Prevention of obesity has become a worldwide challenge.

## 4:00 to 4:50 p.m. Sessions

**4:00 to 4:50 p.m.**

Thomas Library

### **73. The Effects of Exercise on College Students**

***Mazie Reece, Ron Williams, Evelyn Heil***

In college students, what is the effect of physical activity and healthy habits on their mental health, grades, social activity, productivity, and decreased illnesses, compared to students who may not practice the recommended healthy habits?

**4:00 to 4:50 p.m.**

Thomas Library

### **74. Nutritional Status on Campus: Commuter Students vs Residential Students**

***Lacey Church, Laney Yoder, Trisha McConnell***

Every college campus has a population of commuter and residential students. Often, residential students are limited to meal plans and snacks, while commuter students have more of a variety of nutritional resources. This experiment explores which population tends to have a better nutritional status.

**4:00 to 4:50 p.m.**

Thomas Library

### **75. A Population Demographic of Midland Painted Turtles in Conrad Balliet Nature Preserve's Pond**

***Leah Vogt***

This study shows the population breakdown of sex, age, and body size for the Midland Painted turtle population of a local pond in Clark County, Ohio. Over the course of two separate one-month periods, a mark-recapture study was conducted at the pond in order to gather a record on the Midland Painted population of the pond.

**4:00 to 4:50 p.m.**

Thomas Library

### **76. Determining Biofouling Organism Presence through Environmental DNA**

***Lilia Moorman***

Environmental DNA (eDNA) is the genetic material shed by organisms and can be collected from environmental sources like sediment and water. Developing an efficient procedure so that anyone around the world can use eDNA as a detection method for biofouling organism presence and abundance would help to assess biofouling and to potentially prevent it.

**4:00 to 4:50 p.m.**

Thomas Library

### **77. Macroinvertebrates 10 Years After Lowhead Dam Modification, Buck Creek, Springfield, OH**

***Carson Rengel***

Macroinvertebrate collection and pollution tolerance along Buck Creek, Springfield, OH.

## 4:00 to 4:50 p.m. Sessions

**4:00 to 4:50 p.m.**

Thomas Library

**78. Assessing Impact of Channel Restoration in Buck Creek using Drone Imagery**

***Tyrus Adams***

**4:00 to 4:50 p.m.**

Thomas Library

**79. Midland Painted Turtle and Temperature Relation**  
***Becca Yoblinski***

A poster outlining the effect of temperature on the activity of Midland Painted Turtles.

**4:00 to 4:50 p.m.**

Thomas Library

**80. Gender and Personality Predict Attitudes Towards Fiction and Nonfiction Book Genres**  
***Abby Gerstenzang***

Reading is fundamental to American lives and bookstores must appeal to new readers, but most Americans do not complete even a full book throughout the year. I conducted a study to discover if certain types of books are more appealing to individuals based on their attributes to help people better understand what types of books they would enjoy reading.

**4:00 to 4:50 p.m.**

Thomas Library

**81. Debunking the Myers-Briggs Type Indicator (MBTI)**  
***Gabriella Lillico***

The Myers Briggs Type Indicator (MBTI) is a popular personality assessment widely used in the business sector and education sectors. Despite its popularity, psychological research has shown that the MBTI is a poor measure of personality and that the theory it is based on is highly problematic. In this study, I tested the effectiveness of three different MBTI debunking strategies using a pretest/posttest design.

**Online Poster**

**82. Gender Identity and Well-Being**  
***Paige Meyers***

In this study I had transgender participants completed a survey on well-being and gender identity to better understand the relationship between these two variables within this specific population. Researchers have studied well-being within the LGB community, but not much research has been done on this topic regarding the transgender community. My study is meant to fill in some of the gaps in this research by specifically looking at a sample of transgender participants.

## 4:00 to 4:50 p.m. Sessions

**4:00 to 4:50 p.m.**

Thomas Library

**83. Conceptualizing "Us" versus "Them": Comparing Buddhists, Christians, Hindus, and Muslims in the U.S. and India**

***Kyla Tuttle, Maria Rodriguez, Jaiden Newsome, Emily Malick, Chris Long, Michael Little, Emilio Gutierrez, Daivion Greene-Tucker, Cece Critchfield, Lea Blander***

High school religion instructors in the U.S. and India wrote short essays about what adolescents ought to learn about how to treat other people. This qualitative analysis highlights similarities and differences in how between-group relations are conceptualized by adherents of different religions.

**4:00 to 4:50 p.m.**

Thomas Library

**84. Measuring Anxiety Levels in Socially Ranked Mice**

***Haley Eckhert, Daivion Greene-Tucker, Chris Long, PJ Meyers, Olivia Norbut, Maria Rodriguez, Gabby Stern, Grayson Timms, Kira van Ravensberg, Cassidy Webber***

Why We Chose This: We chose to present and display these specific tests because we have been working with mice for the past few weeks and have researched and completed many different experiments to evaluate anxiety and social dominance. The two tests we conducted were the elevated zero maze which measured anxiety levels by calculating the amount of time the mice spent in the open arms, and the social dominance tube test (SDTT) which measured the social rank among a group of three mice.

**4:00 to 4:50 p.m.**

Thomas Library

**85. Examining Social Dominance and Anxiety in Mice**

***Emily Malick, Annie Wethington, Tiffany Moss, Kyla Tuttle, McKenna Boling, Taylor Crawford***

We are looking at the sex differences of levels of anxiety in mice using elevated zero maze data.

**4:00 to 4:50 p.m.**

Thomas Library

**86. Electroencephalograph (EEG) Demonstration**

***Guille Del Rio Gonzalez, Michael Little, Alyson Parks, Eli Reed, Drew Sheldon, Malik Taylor***

A live demonstration/explanation of the function, history, and uses of the EEG using alpha waves and the P300 response as examples.

# Separately Scheduled Events

**9am to 5pm M-F**  
**April 15 to May 10**

Ann Miller Gallery,  
Koch Hall

**100. Senior Art Exhibition: Where did the time go?**

Featuring work from:

***Elizabeth Cronau, Mackenzie Morgan, Ethan Smith, SeRaye Bray, Katie Wadds, Kira Frieson***

**1:00 to 2:30 p.m.**  
Hollenbeck Hall 131

**English Department Senior Symposium – Session A**

***“This fire that’s burning represents the passion you have”:  
Black Voices in Contemporary America***

***Celieta Ohlinger***

**101. “Thugs” vs “All-American” Powerful Stereotypes, Extreme American Patriotism, and the Destructiveness of Passive Racism in Jason Reynolds and Brendan Kiely’s All American Boys**

***Kevin Marshall***

**102. Un/Charmed Echoes: Baldwin Warned Us, Reagan Showed Us, Lamar Tells Us “F\*ck Your Ethnicity”**

***Myia Smith***

**103. The Recurring Repressed: Racial Trauma and Cycles of Violence in Toni Morrison’s *The Bluest Eye***

**2:45 to 4:15 p.m.**  
Hollenbeck Hall 124

**English Department Senior Symposium – Session B**

***“No joy without justice”: Transatlantic Journeys, Legacies of Confronting Slavery & Colonization***

***Satta Sheriff***

**104. Liberian Colonization and Spirals of Intergenerational Violence in Shannon Gibney’s *Dream Country***

***Joanna Perkins***

**105. The Beauty and Necessity of Killing Joy in Fanny Kemble’s *Journals***

**2:45 to 4:15 p.m.**  
Hollenbeck Hall 131

**English Department Senior Symposium – Session C**

***“Variety is the Soul of Pleasure”: Women and Power in British Literature***

***Taylor Easlick***

**106. Reevaluating History Through Female Empowerment in Marie de France’s “Lanval”**

***Bella Fiorito***

**107. The Roving Women’s World: The Evolution of Female Agency and Constancy in Aphra Behn’s *The Rover*, Parts I and II**

***Tiana Hughes***

**108. Where Empiricism Fails, Listening Prevails: Lib’s Journey Toward Remedy in Emma Donoghue’s *The Wonder***



# Map of Locations

