

Celebration of Scholarship

2017 Directory of Participants



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Welcome to the Third Annual Celebration of Scholarship!

We are delighted to host Penn State Wilkes-Barre's third annual research fair, the Celebration of Scholarship. The CoS has grown each year, and this year, over 200 students will present 145 posters from 15 faculty sponsors.

This event has become truly collaborative, with participants and volunteers from a variety of campus offices. It would be risky to try to list everyone for fear of accidentally excluding someone; however, it is fair to say that every department on campus participates in some way with this event, from facilities and maintenance to the faculty and staff, whether in terms of guiding student research, coordination and setup, or volunteering as judges. We are indebted particularly to Tim Sichler for his annual printing of the posters, which takes many, many hours to complete.

This year, we have added some new, formalized programs to prepare for this event – Lorna Chin provided four days of tutoring and assistance in the Nesbitt Library for students who wanted feedback and guidance on their presentations. Career Services has invited local businesses to join the celebration and view our students' potential. The Student Activity Fee has graciously provided the pizza, drinks, and cake for the main event. In addition to supplies, coordination, training, and research assistance, the University Libraries are contributing funding for the main prizes in the event. And speaking of prizes, we invite everyone to return to the ARB gym at 4:00pm today for some refreshments and a brief ceremony to announce the top posters in this event, courtesy of the Chancellor's Office.

The Celebration of Scholarship Committee hopes that you will have an exciting day here at Penn State Wilkes-Barre, and that you will learn from the work of our students.

The Celebration of Scholarship Committee, 2017

Jennie Levine Knies, Head Librarian,
Megan Mac Gregor, Student Engagement and Outreach Librarian
Tim Sichler, Instructor, Engineering
Dr. Renee Rosier, Assistant Professor, Biology
Dr. Lynda Goldstein, Associate Professor, English
Dr. Esra Tekdal, Assistant Professor, Surveying Engineering
Melisa Naylor, Instructor, Rehabilitation and Human Services
Jeff Chiampi, Instructor, Information Sciences and Technology

- 0001:** Ruby Amigon, Corey Eyerma, Ian Storer. *Flash Bang*
Using electrical engineering principles and design techniques we created a polyhedron with high intensity light and sound for the sole purpose of disorienting a potential assailant.
- 0002:** Stephanie Baines. *The Obedience Experiments*
To give people a better understanding of obedience and the experiments that have been done with obedience.
- 0003:** Leeandra Ricks. *Sleep Deprivation*
This poster is about sleep deprivation
- 0004:** Jordan Behrens, Catrina Coppola. *Developing a Control Survey for a Photogrammetric Mapping Project*
This project explores how to develop a control survey for a photogrammetric mapping project, intended to serve for a base map of a Geographic Information System (GIS). A control network will be developed and surveyed using GNSS technology and mapped using a UAV with the GNSS control network as inputs for the UAV flight plan.
- 0005:** Tristan Byers. *More Than Words a Deeper Look at Bullying and its Mental Health Effects*
Bullying is an unfortunate part of growing up and has been for several years. In the past few years the rate of teen suicide in relation to bullying has been on the rise. The impact of bullying goes deeper than many may expect. The effects of bullying in youth can have an impact on the victims mental health and can have a negative effect on their personality and their overall development as a person. This poster takes a look at bullying and it's impact on the victims mental health and how it impacts them in their day to day lives.
- 0006:** Jonathan Rosario. *Cell Phone detector*
Senior project. Cell phone detection system that allows users to detect phones by their frequencies.
- 0007:** Jordan Bavitz. *Consciousness and the Two-Track Mind*
Consciousness is a very touchy topic when finding out the real history and meaning behind it. There are many types of sciences that have such fundamental concepts that it is almost impossible to define the word. My poster will talk about a brief discription of what psychology was defined as in the 20th century and how the meaning of the word has changed. I also explain one of many arguementative theories on how the mind and the body are different. I then proceed to inform my audience on how the two track mind and consciousness cannot be compared or contrasted because we as humans still are not sure of the nature in understanding thought.
- 0008:** Quentin Hugo, Kevyn Luchaco. *Geomagnetic Storms*
In a world surrounded by technology the worst possible scenario is this posters topic! Geomagnetic Storms could mean the end of your fancy cell phone, that piece of plastic in your wallet, cars, and nearly everything since the stone age! Come find out what's so shocking!
- 0009:** Quentin Hugo. *Bearing-less Induction Motors*
Efficiency is one thing that all engineers compete to do the best, a lot of efficiency is lost to heat due to friction. Today we have the technology to eliminate that factor of friction and approach almost complete efficiency using a bearing less induction motor.

- 0010:** Samantha Orth, Samantha Orth. *Gender Stereotypes Negatively Affect Women and Men*
This research discusses exactly what gender stereotypes are. It goes over that the media and individuals instill these stereotypes in society. The research then explains some of the negative things that can occur if someone attempts to follow gender stereotypes or if they do not fit into a stereotype.
- 0011:** Shaina Shelton. *How Cults Recruit New Members*
A description of what characteristics make individuals vulnerable to cult recruitment, and explanation of the three stages cults use to indoctrinate new members.
- 0012:** Eric Whited. *The Effects of Violent Video Games on Adolescents*
I performed a study on how young adolescent children can be socially effected by violent video games
- 0013:** Michaela Coolbaugh, Michaela Coolbaugh. *What are some theories of aggression?*
Some theories on why individuals may exhibit aggressive behavior and what kind of factors play into this.
- 0014:** Kevyn Luchaco, Robert Briggs. *Measuring the Flow Rate of Liquid Dispensed from a Container*
The basis of our project is to be able to accurately determine the amount of liquid that is within a container at any point in time. The largest hurdle in this process is obtaining accurate data that can be interpreted and used to determine the liquid level. What this system does is measure the weight of a container and compare that value to a preset value entered in the software, which will in turn provide the current weight of the container. Once that value is known the software then determines the amount of fluid in the container through calculations done by the program. This system is designed to be relatively easy to wire up and install and with the software all ready written, anyone could download it and run it themselves.
- 0015:** Emma Evans. *Attitudes: Shaping and Forming Our Behavior*
This research focuses on how the attitudes that we have, influences our behaviors. It demonstrates how the differences in our attitudes compared to another person's will allow our behaviors to be vastly different. For example, if one person has a positive attitude toward school, he/she is more likely to continue his/her education. However, if a person has a negative attitude toward school, he/she is less likely to advance his/her education. Hence, their attitudes directly influence their behavior. Overall, this research explores the fact that our attitudes may be a large factor in what affects the differences in our cultural practices and beliefs.
- 0016:** Katie George. *Psychological Aspects When Interrogating the Mentally Ill*
This research is about the psychological aspects that may occur within individuals with mental illness. This includes interrogation tactics used by law enforcement to determine guilt of the suspect even when the individual is deemed innocent. Some common disorders are also listed that factor into this research and make it easy for law enforcement to pursue a false confession from these individuals.

0017: Emma Evans. *Media's Effect on Social Cognition*

This research focuses on how the media in today's society plays a strong role in determining how we react to different social situations due to our social cognition. Social cognition is our ability to interpret, store and apply information to different scenarios. It is what makes us react the way we react and believe what we believe. Media's role is strong in this concept because we are influenced by it every day. For instance, different news outlets have different audiences, therefore, these audiences will react differently to every situation because the media has effected their cognition and therefore, the way they are applying this information in a social scenario.

0018: Andrew Boberick. *Does Adrenaline Give Us Super Human Abilities?*

This poster explains what adrenaline is, and its mental and physical effects on the body. The information is backed by numerous scholarly studies and research to prove its legitimacy.

0019: Lauren Jenkins. *Eyewitness Testimony: Reliable or Not?*

This will look at how reliable an eyewitness testimony can be in the conviction of a criminal

0020: Maggie Dow. *Is Our Birth Order Our Destiny?*

My poster presents the question of "Is our birth order our destiny?" Alfred Alder, the pioneer researcher, thought birth order and personality directly correlated, but recent studies have found little to no correlation. Therefore my research refutes Alfred Adler's theory of birth order.

0021: Scott Roper. *Post Traumatic Stress Disorder and the People Effected*

My poster presentation goes over the unique and rapidly growing disorder known as Post Traumatic Stress Disorder (PTSD) and the things and ailments that are associated with it.

0022: Jacob Fullmer. *Priming, and the effect it can have on obesity rates*

Showcasing studies done about priming and how it can affect eating habits, with a focus on children.

0023: James Lapidus. *Everyone Needs Z's*

Are you feeling tired? Irritable? or exhausted? You may in fact just be sleep deprived. Sleep is very important to everyone's body and mind. My poster contains information about negative effects sleep deprivation can have on humans, and also how to try and combat them.

0024: Chaquana Zendarski. *Environmental and biological influences on sexual orientation*

Environmental and biological influences on sexual orientation

0025: Alaena Lloyd. *How to Change Your Emotions at Work*

My poster explains how your emotions can affect you at work, the basic emotions, how emotions can occur, understanding your emotions and other peoples emotions, and how to improve your emotions.

0026: Austin O'Reilly. *Panic Disorder*

panic disorder

0027: Ali Canfield. *Who Would You Hire?*

Physical attractiveness affects us over the course of our lifetime. We tend to perceive more attractive people as having more positive characteristics.

- 0028:** Thomas Blasi. *Healthy Ways to Manage Stress: Exercise and Relaxation*
My poster dives into the stress relieving benefits of exercising and relaxation.
- 0029:** Nicholas Klimchok. *Conformity and The Effects on Individuals*
This Poster will discuss conformity to authorities and its effects on individual's actions.
- 0030:** Lauren Dragon. *Do Video Games cause Negative psychological effects?*
Video games are becoming an increasingly popular form of entertainment, yet many individuals have difficulty controlling their level of video game play, entering into a territory of clinical concern termed pathological gaming. Pathological gaming is associated with higher rates of mental illness and bears a strong resemblance to substance use disorders.
- 0031:** Erin Scafella. *Nature, Nurture, and Personality*
Nature and Nurture combine in order to form an individual's personality.
- 0032:** Aaron Tosh. *The Impact of Sleep Deprivation on Memory and Mood*
This presentation deals with the impact that lack of sleep has on cognitive functioning and mood.
- 0033:** Matthew Corbett. *Prejudice*
Prejudice is a preconceived negative judgement of a group and its individual members. As it's seen everywhere throughout society, this preconceived judgement upon people is part of our culture. Throughout this presentation, four broad categories will be analyzed: Defining prejudice, where prejudice stems from, the theories of prejudice, and how we can reduce this judgement and behavior.
- 0034:** Sean-Paul Williamson. *How Drugs Affect the Brain*
An overview of how drugs work in the brain as well as the long-term affects of drugs on the brain.
- 0035:** Jacqueline Rabender. *Negative effects of ostracism*
What ostracism is and how it effects people
- 0036:** Aashray Anand. *The Psychology of The Placebo Effect.*
A deeper look into the placebo effect one of the most commonly used psychological concepts. Also how it came into its being and is it all positive or is there a darker side to it.
- 0037:** Brian Greenawalt. *Alcohol Abuse in Correlation With Post Traumatic stress Disorder*
Explores the correlation between alcohol abuse and PTSD symptoms in combat veterans.
- 0038:** Joseph Schesney. *Central vs. Peripheral Routes to Persuasion*
In this study I will be comparing the two routes to persuasion and trying to determine how effective they are in actual persuading someone on a certain topic
- 0039:** Keith Baxter. *Is Conformity Harmful?*
Conformity has been found to have an influence on many aspects of our lives. This influence can be found in subjects that affect us all such as Politics, or something that influences small groups such as interaction between one's peers. The main objective of this presentation is to identify these acts of conformity, and promote a discussion on whether or not this influence is dangerous, positive, or a little of both.

- 0040:** Curtis Evans. *How Authority Affects Aggression*
Explains the reasoning behind riots, and social conformity when impacted by authority.
- 0041:** Christie Conway. *LGBT Stereotypes in the Media*
Stereotypes that effect the lgbt community.
- 0042:** Colby Richardson. *Reduce Stress Before You Test*
techniques to calm test anxiety.
- 0043:** Nicole Hilstolsky. *Climate Change Beliefs in America*
Climate change beliefs in America can be determined by many different factors. These factors include but are not limited to; political views, economic status, social status, where you live, and whether you believe it is a personal or collective responsibility.
- 0044:** Barry Pawloski, Taylor Finan, Morgan Smith, Emily Connors. *Exxon Mobile: SWOT Analysis*
SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis for Exxon Mobile.
- 0045:** Barry Pawloski, Eric Adamczyk, Alexander Klinger, Brandon Povilitus. *Types of Real Property Deeds*
History of Deeds, Process of Transferring Property, and Types of Deeds
- 0046:** Susan Huey. *Sharswood Revitalization?*
A look into the Sharswood Blumberg Transformation Plan taking place in the Sharswood neighborhood located in Philadelphia. This project is a large scale project that Philadelphia has never attempted before. Hence the question if this project can be completed and finished, and if it were to fail why.
- 0047:** Susan Huey. *Inflation, Blowing Up Your Textbooks?*
A quick look into the history of the inflation formula in the United States of America, and how the formula can be applied to something like the cost of textbooks.
- 0048:** Jeffery Johnson. *Horizontal Network Least Squares Adjustment: The Bridge Between Theory and Reality*
In surveying, as in many other scientific data gathering projects, it is difficult to make measurements that are completely free of errors. However, surveying data typically relates to itself in geometric ways. For example, in a horizontal network, we can compare the observed angles with azimuth formulas and the observed distances can be compared to the distance formula. Theoretically, the errors occur equally in each observation, but when more observations are made, farther away from the control points, these errors compound on themselves and appear to be greater. It is necessary to make sure that these errors are evenly distributed throughout the network. A method used to counteract this problem in Surveying is called least squares adjustment. It uses first order Taylor's series approximations, and matrix manipulation to spread the errors throughout the network in ways that more closely match with the reality of the network.
- 0049:** Saleem Abualburak, Mohammad Abualburak, Chandra Adhikari, Micheal Tandoh, Tim Walters. *Simple Pendulum*
The simple Pendulum Setup is designed to explain how the length of a mass less rod or string attached to a bob is directly related to time, regardless of the mass of an object.

- 0050:** Kyle Brogan. *All Quiet on the Western Front*
Presents the novel All Quest on the Western Front along with the two film adaptations, discussing cultural significance and comparisons of the time period and versions of the novel and film.
- 0051:** Jessica Ross, Evan Barber, Jonathan Wilson, Sam Corsello. *SWOT Analysis of Marriott Hotels and Resorts*
A SWOT analysis of Marriott Hotels and Resorts with a focus on financials.
- 0052:** Jonathan Rosario. *How social relationships affect health and well being*
How social relationships affect health and well being
- 0053:** Susan Huey, Ryan Baldwin, Adam Curry, Adam Garnett. *Residential Leases*
This poster is an overview of residential leases, the types of residential leases, and the most popular ones used today.
- 0054:** Kailee Taylor, Rick Dierenfeldt. *College student perceptions of balanced and restorative justice*
Balanced and Restorative Justice (BRJ) is an approach in the juvenile justice system that takes into account the needs of all individuals involved after a crime occurs, the victim, offender, and community.
- This study allows us to have a understanding of college students perceptions regarding BRJ. It is significant to have their perceptions because at one point every student will be entering into the professional field.
- 0055:** Aaron Wrobleski. *Diving into Narcissistic Personality Disorder*
My poster is about NPD. I point out some facts and utilize the information found to help broaden someones knowledge on the topic. It's about the tendencies of someone with it and how to deal with them.
- 0056:** Eric Williams, Frank Brodi. *How Solar is Penn State Wilkes-Barre?*
Calculate the solar radiation for the campus and determine the price for installation of solar panels for the campus.
- 0057:** Olivia White, Malak Abuelhawa. *Human Demography*
Experiment done on human demography comparing the survivor ship between veterans and non-veterans.
- 0058:** Joshua Sokoloski, Abdallah Abulaban, Abraheem Abdelqader, Seamus Rother. *Solar Energy*
This presentation is about the way solar energy works and the postive effects it can has on the enviroment.
- 0059:** Thomas Blasi, Paul Fusco. *Survey Control in Structural Tunneling Applications*
Our poster describes how to set up a surveying control network for a tunneling project.
- 0060:** Joshua Piestrak, Thomas Pistack. *Luzerne County Horizontal Control Network*
A GPS derived horizontal control network for Luzerne County, Pa. Discussion includes initial planning, observation, and cost analysis.

- 0061:** Jonathan Santos, Khalid Liburd. *Construction Survey Column Stakeout for a High-rise Building*
An area in Camden, NJ was taken for government use, and 360 Surveying Co. was tasked to provide the layout for construction crews to build a high-rise building on site. A construction stakeout was carried out on a lot 1200 ft by 1200 ft for a high-rise structure.
- 0062:** Brett Hepler. *Put Hepler Beef In Your Freezer*
This is a poster that I have made about my family's beef farm and its history.
- 0063:** Elizabeth Keegan. *Height Modernization: Forest County, PA*
The height modernization program was designed to provide access to reliable heights throughout the nation. Using the National Geodetic Survey (NGS) published guidelines and standards, this project simulates a height modernization plan for Forest County, PA.
- 0064:** Aaron Martinez. *The Effect of target intensity and target-instrument geometry on terrestrial laser scanner accuracy*
This project aims to understand how target-instrument geometry effects the accuracy of terrestrial laser scanners.
- 0065:** Aaron Martinez. *Highway Tunnel Survey Design*
This project briefly describes the process of designing a survey for a highway tunnel.
- 0066:** Bob Costello. *Nittany Nock; Electrical Engineering Technology Senior Project*
For my senior project, I am designing and testing a lighted nock. I intend for this product to be used in both recreational archery and bowhunting.
- 0067:** Susan Huey, Gage Brown, Chris Cantine. *S.W.O.T. Analysis of UPS*
This is a quick SWOT analysis of United Parcel Service, or better known as UPS.
- 0068:** Tim Ace. *Feed America: Access to food is a human right*
This poster is about the french food law that america should strongly consider.
- 0069:** Megan Welles. *The Reading Terminal Market*
Exploring a piece of Philadelphia's history in food vending.
- 0070:** Kyle Brogan. *Child Labor in the Modern World*
The purpose of this poster is to give a correlation with child labor, from the 19th into the 20th Century in the United States, with child labor in countries now in the 21st Century.
- 0071:** David Breese. *Memory Jar*
Our memory jar is meant to invoke two senses instead of one like a normal picture frame.
- 0072:** Wade Weber. *Gothic Architecture Elements in Beauty and the Beast*
This is a poster which explains several key components of Gothic Architecture. It also explains the elements as they relate to Beauty and the Beast.
- 0073:** Tiffany Amigon. *Media's Effect on Teen Anorexia*
This poster explores the medias' influence on young teens and how it contributes to anorexia.
- 0074:** Miranda Pace. *What makes a mass murderer?*
Investigation of correlations and risk factors of how someone could become a mass murderer.

- 0075:** James Lapidus. *The 7th Right*
This poster presentation divulges into a Human Rights issue that seems to have never died out, no matter what people think. By explaining the Jackie Robinson issue that happened many years ago, I am able to relate it to the present. Have times really changed?
- 0076:** Tanner MacDougall. *The Importance of Mechanical Engineering at The Fairmount Water Works*
A look into the Fairmount Water Works located in Philadelphia, Pennsylvania, explaining how mechanical engineering played an important role in supplying the city with water during the 1800's.
- 0077:** Kyle Neiswender, John Aston. *Closing the Gap*
How to construct a bridge using surveying methods
- 0078:** Richard Portugal. *Animal Farm by Richard Portugal*
My poster for my CMLIT 453 Class. I did it on the novel/1954 Film version of Animal Farm.
- 0079:** Daniel Ott, Rich Kenzakoski. *Golden Gate Bridge of Pennsylvania*
Imagine having a look-alike Golden Gate Bridge across the Huntsville Reservoir that connects PSU Wilkes-Barre students directly to the Dunkin Donuts in Dallas, PA and avoiding a local dangerous five-way intersection! In this project we created a survey plan, including network and measurement analysis as well as estimating cost of survey to build this bridge.
- 0080:** John Fagotti, Dan Costantino, Adam Valkos, Tim Chimock. *Costco Wholesale SWOT Anaylsis*
Costco Strengths, Weaknesses, Opportunitites and Threats
- 0081:** Kathryn Wacławski, Kaylee Kishbaugh. *The Logarithmic Nature of Earthquake Magnitudes*
The Moment Magnitude Scale and Richter Scales are scales used to quantify the intensity of earthquakes. Both scales are based on a logarithmic scale (base 10), meaning each unit increase on the scale represents 10x greater intensity.
- 0082:** Arthur Coolbaugh, Tim Elston, Kyle Archer, Angelo Kwak, Andrew Casey. *The Physics of Baseball*
We did some brief research and math on how the concepts of physics apply to the sport of baseball.
- 0083:** Austin Rought, Richard Kresge, Eric Whyte, Tom Lyons, Bobby Gilpin. *Ballistics of Common Hunting Calibers*
For our project we calculated the distance in miles that some common hunting rifles would be able to shoot. We calculated this by getting the initial velocity from a chronograph and then using certain physics equations to calculate the total range at 30 degrees. We chose this angle to show the danger of how far it would travel if shot over the horizon or tree tops.
- 0084:** Kyle Archer, Arthur Coolbaugh. *The Death Penalty and Human Rights*
Completed research on how the UN's Articles of Human Rights applies to the issue of capital punishment around the globe, past and presently. We also included works of film and literature to further this research.
- 0085:** Vincent Munro. *Gothic Scooby Doo, Where are You?*
Is Scooby Doo Gothic?

- 0086:** Vincent Munro. *The Great Escape*
Is the risk worth the reward?
- 0087:** Seth Gulich. *GPS Control Network Applications for Roadway Tunneling Projects*
A GPS control network is needed for around a tunneling project. The network needs to provide horizontal and vertical control for the rest of the phases of the construction.
- 0088:** Hanna Sulkowski, Emad Elbattah, Mason Moore. *Uber*
A financial analysis of Uber's financial strengths, weaknesses, opportunities, and threats, a summary of the company, and it's current financial status
- 0089:** Hanna Sulkowski, Alan Hilenski, Gage Brown. *Essential Elements to a Valid Contract*
An explanation of the essential elements to a valid contract (past, present, and future)
- 0090:** Wyatt McMarlin, Graham Speace. *ArcGIS Case Study of the "Great St. Patrick's Day Flood of 1936" in Pittsburgh, PA*
A comparison between the historical records documenting the 1936 St. Patrick's day flood, and a flood model created with ArcGIS mapping software.
- 0091:** Marc Balzani. *The use of Body Cameras by Law Enforcement*
This poster will look at students perceptions of police and the use of body cameras.
- 0092:** Wade Weber, Tyler Weiss. *Burning Bridges*
This is an overview of our bridge construction project. This poster focuses mainly on setting up a control network for the jobsite.
- 0093:** Christopher Potoski. *Violent Crime in Wyoming Valley Drug Free Zones*
A look into the locations of Drug Free School Zones in the Wyoming Valley and crimes occurrences relative to their locations.
- 0094:** Katelyn McLaughlin. *Death Penalty: Human Rights Issue?*
This poster takes a look into death row inmates that may be innocent and debates whether the death penalty could be considered a human rights issue. These issues will be tied back to the documentary "Into the Abyss," a documentary about two men convicted of triple homicide while still claiming their innocence.
- 0095:** Katelyn McLaughlin. *Crime Rates and the effect on Low Educational Attainment*
This research looks to find if crime rates in a city will effect their level of educational attainment by looking under the social disorganization theory.
- 0096:** Mary Owen, Zachary Scrobola, Robery Kinney. *Calculating Projectile Motion of an Object*
Example problem of how to calculate various components of projectile motion.
- 0097:** Chris Cosentini, Aaron Kopicki. *Economic Impact of Natural Gas Drilling Focus: Marcellus Shale Region of Northeastern and Northcentral Pennsylvania*
Since 2008, traditional economic indicators have shown slow economic growth nationwide. In the Marcellus shale natural gas region of northeastern and north central Pennsylvania three of those indicators were examined: 1) Median Income 2) SNAP program and 3) Family Poverty Rate. Using maps, graphs, and statistics this presentation will show how, economically, the natural gas industry affected the region.

- 0098:** Thomas Day, John Wychock, Matt Clemow. *On Target*
In our project, we released a ball down a ramp, allowed it to roll on a table and then let it fall. We calculated the point on the floor it would hit. The objective is to calculate the location where a projectile will hit the ground using the kinematics equations.
- 0099:** Katherine Kelch. *An Industrial Orchestra*
The Wanamaker Grand Court Organ is the largest working organ in the world. It is a staple landmark of Philadelphia, and it is a representation of the illustrious culture of the city.
- 0100:** K. Jacob Gibbs. *Fire Station Response Time Analysis*
The developed land area in Philadelphia is not properly covered by at least one fire station in a 1.5 mile radius. To minimize delays and damage, new fire stations have been proposed to properly cover the developed land area.
- 0101:** Bryan Whiting. *Daedalus Tower: Survey Project Planning, High-rise Tower Layout*
The poster displays an aerial view of a potential project site for a high-rise tower. Methods of establishing control, equipment utilized, and coordinate transformation are also included.
- 0102:** Neno Agnello, Sorber. *City Hall Philadelphia: Two Sides of The Story*
This poster provides in depth detail on how City Hall in Philadelphia became one of the most iconic architectural buildings in the country after receiving heavy criticism early on.
- 0103:** Nicholas Myers. *Reconstruction of the Benjamin Franklin Bridge*
This poster shows a survey plan for the construction of the Benjamin Frankling Bridge. It is an over veiw of what a survey plan entails.
- 0104:** Josh Harenza. *Human rights in war*
poster describes how the damage of humanity during world war II set new laws for fighting wars
- 0105:** Alexa Webby, Heidi Kile, Adam Garnett, Curtis Evans. *SWOT Analysis: McDonald's*
For Corporate Finance, our group created a SWOT Analysis along with a brief financial summary, including stock price, financial ratios, and financial history of McDonald's.
- 0106:** Curtis Evans, Joseph Reilly, Stephen Doroskewicz. *For Sale by Owner Vs. For Sale by Realtor*
Our poster compares the benefits of selling a home through a real estate company and the benefits of selling a home by yourself.
- 0107:** Tanner MacDougall, Garrett Reese, Neno Agnello, Luke Sorber, Michael Jannuzzi. *The Stirling Engine: Thermal to Mechanical Energy*
This poster provides a detailed explanation of how a Stirling Engine operates through a step-by-step demonstration.
- 0108:** Cameron Shaner, Spencer Bowanko, Olaf Kozakiewicz. *Formation of Elements in Stars*
The Formation of Elements in Stars project focuses on the common processes classified as nucleosynthesis. The poster will go in depth with the 2 main reactions, the energies associated with them, the byproducts of each, and the potential radiation and its effects on life.

- 0109:** Wyatt McMarlin. *ALTA Boundary Survey Network Design and Equipment Feasibility Check*
This poster focuses on using computer software to simulate measurement errors in two land survey point networks associated with 10-acre land parcels near Denver, Colorado.
- 0110:** Emma Evans. *An Ethnographic Study: Exploring the Subculture of a Local Pool Hall*
The primary research done in this study, focused on the subculture that is represented in a local pool hall. I have been playing pool here for many years and have never noticed the diversities amongst the players. These diversities are what makes the subculture what it is: a place where two different kinds of people can come to have fun and relax, regardless of what they might be categorized as. Recognizing this pool hall as a diverse place might pose a challenge to some, but despite this, it is important to recognize that what is shown on the outside, might not reflect everything on the inside.
- 0111:** Jon Schwartz, Ron Neher. *Luzerne County Voting Patterns 2000-2016*
Several maps show Presidential election results from 2000-2016
- 0112:** Maquiyyah Spears. *The Foundation of a Free Country*
This poster is about the birth place of the Constitution and the Declaration of Independence and the influences they had on the city's growth through artwork.
- 0113:** Shaina Shelton. *Blue Chip Farm Animal Refuge: A Place of Healing*
A presentation of the subculture of our local no-kill animal shelter, Blue Chip Animal Farm Refuge.
- 0114:** Julia Miller. *Eastern State Penitentiary (ESP)*
Quick facts about the structure, important dates, Al Capone, and Willie Sutton.
- 0115:** John Chapman. *Philadelphia's Layout*
With this poster I am just going over a quick overview of why the city was planned the way it was as well as how it has changed to now.
- 0116:** Garrett Reese. *A Struggle For Clean Water: Philadelphia's Story*
This poster takes the reader through a historic tour of Philadelphia's struggle to achieve a safe and reliable water source.
- 0117:** Luke Sorber, Neno Agnello, Spencer Bowanko, Matthew Clemow, Bobby Gilpin. *How To Write A Feasibility Report*
This poster will cover the basic steps and guidelines on how to write a proper feasibility report.
- 0118:** Jesse Ragugini. *Correlation of Heroin Use and Arrest within Cities*
This study will research the possible underlying factors as to why people use heroin. This research's framework is based off of Shaw and McKay's (1942) Social Disorganization Theory. A bi-variate analysis is used to examine the independent variables concentrated disadvantage, residential instability, and ethnic heterogeneity with the dependent variable heroin arrest rates.

- 0119:** Blaise Waligun, Colby Karnes, Emily Miller, Greg Bronsberg, Kathryn Wacławski. *Will It Make It?*
A toy car longs to smash and crash, but sometimes to achieve its "demolishing derby" dream, it must overcome obstacles in its path. This experiment is a 2-D, Physics-based, experimental-investigation on which path is the best to maneuver over a wall that is in the toy car's path, and how different angles will affect the trajectory of the toy car as it is launched off a ramp and over a wall. With repeated launch trials by means of a constructed device, off a ramp, with changing angular values, an optimal ramp angle is hoped to be found to maximize distance whilst clearing the wall. Will it make it?!
- 0120:** Matthew Caines, Sara Biller, Nick Stchur. *Misrepresentation*
Misrepresentation is a significant issue in business, to the point that it is the lawsuit that brokers face most often. This poster explains what misrepresentation is, how it can be avoided, and what its repercussions are. Examples are also given along with information about the laws in Pennsylvania regarding this topic.
- 0121:** Kaylee Kishbaugh. *Judging a Book By Its Cover: The Liberty Bell*
The Liberty Bell has several physical characteristics that tell a story: what the bell has been through, why, and where it led to. This poster delves deeper into its past.
- 0122:** Ingrid Ritchie. *Examining the (In) Equalities in Structural Covariates of Gender-Specific Drug Arrest Counts*
Previous research has investigated the association between levels of crime and structural characteristics of communities; in particular, concentrated disadvantage. The buying, selling, and use of certain kinds of drugs is disproportionally linked to racial and ethnic minorities. Feminist criminology has suggested arrests of women for drug-related offenses may disproportionately be affected by structural characteristics of communities, as well as police practice. Extant literature, however, has failed to test this hypothesis across contextual units or drug types. The proposed study will fill these gaps in literature by assessing inequality in the structural covariates of gender-specific drug arrests for methamphetamine, heroin, and crack cocaine in a sample of medium to large U.S. cities.
- 0123:** Matthew Boyes. *Flood Prediction and Analysis of Wilkes-Barre Area*
Flood Prediction and Analysis of Wilkes-Barre Area
- 0124:** Kathryn Wacławski. *Roller Coaster Physics*
Roller Coaster engineers do more than just make rides for the public's enjoyment. They keep Theme Park-enthusiasts safe. The amount of Physics and Calculus that goes into designing a Roller Coaster track and its carts and harnesses is extensive. One miscalculation can send many people to the hospital or even their deaths.
- 0125:** Greg Strazdus. *Implementation of Google for Education: A Case Study of the Dallas School District in Pennsylvania*
In 2015, the Dallas School District decided to "Go Google." This was a multi-year project that transferred Email, File Storage, Classroom Collaboration, to the Google Suite. This research allows other school districts to learn the process of transferring to Google for Education or "Suite." It showed the results and opinions from different school district members which were collected through a survey.
- 0126:** Isaac Bennett, John Chapman, Josh Harenza, Zach Kenzakoski, Thomas Cosgrove. *Bed of Nails*
The poster describes how a bed of nails works.

- 0127:** Jacob Chalawich, Matthew Bobkowski, John Ostopick, Tyler Wozniak. *Factors Affecting Projectile Motion*
Covering: Magnus Effect, Coriolis Effect, Air Resistance / Drag / Aerodynamics
- 0128:** James Rhoden. *Dungeons and Dragons*
This is a poster with a basic focus on the subculture of Dungeons & Dragons.
- 0129:** Nathan Mansfield. *How Water from Different Sources Affects the Growth of Fungi*
I studied how certain water qualities affected the growth of fungi on plants. The reason for this study was that water is very important to our everyday lives. We are actually made up of mostly water. I collected water from three different sources. The first source was the Susquehanna River. The second source was the Seven Tubs Nature Area. The final area was from the tap of our bio lab.
- 0130:** Adam Curry. *Does caffeine lead to cannibalism? A test in Tenebrio molitor*
Caffeine is a stimulant for humans, boosts memory in bees at low doses, reduces reproduction in butterflies, and is also a natural insecticide. This poster focuses on how caffeine affects the Darkling beetle life stages; including the rates of growth, reproduction, survival, and cannibalism. This experiment has been continuing for 20 weeks, through the weekly measurements in the caffeine and control enclosures. Caffeine had no significant effect on growth, reproduction, and survival; however it lowered cannibalism rates. These results are related to the lower energy rates given from caffeine. The long term effects caffeine has is not yet conclusive.
- 0131:** Daniel Evans, Austin Clouse, William Hudock, John McDonald, Anthony Shaver. *Velocity of an arrow*
Average velocity of an arrow.
- 0132:** Matthew Caines. *Perceptions of the Death Penalty Among College Students*
Few studies to date have focused on the attitudes of college students toward the death penalty. This poster describes the role of college major, among other factors, in shaping one's attitude toward the death penalty and its effectiveness.
- 0133:** Max DeAngelo. *Using GIS to Create a Predictive Crime Model*
Use ARCGIS to create maps based on social economic parameters to label potential areas that could have higher crimes rates. Then compare the label areas to the total crime rate per population for that area using the Uniformed Crime Report data from the FBI to see how accurate the predictions are.
- 0134:** Aaron Tosh. *Human Rights Violations During The Rwandan Genocide*
This poster examines the human rights violations occurring in Rwanda in 1994.
- 0135:** Hasham Jaffri, Amari Boyd, Khalid Liburd, Zacharia Sao, Shikongha Cyril Tankam. *Thorium Based Nuclear Power: Future or Bust*
Nuclear energy is a large part of everyone's life, weather people like it or not, but what if there was a alternative source of nuclear power besides uranium. Thorium is another resource that can replace uranium in power production. Not only is it safer, but unlike uranium it can't be weaponize. This presentation will explore the benefits and draw back of Thorium.

- 0136:** Tayler Dove, Deanna Richards, Juan Cruz. *Balloon Powered Car*
Using Newton's third law of motion the air from a balloon pushes a bottle car forward in the opposite opposing direction of the force applied.
- 0137:** Zachary Scrobola. *Overabundance and Deforestation of Pennsylvania by White-tail Deer*
An experiment conducted to see if there is a direct correlation between a rapidly expanding White-tail population and the destruction of Pennsylvania's forests by "nature".
- 0138:** Danny Costantino, Adam Valkos, Imad Emattah. *Types of contracts and residential leases*
Dr. Weber
- 0139:** Mitchell MacDougall. *How Will Microwaves Affect The Germination Of Sunflower Seeds*
A study of the what microwaves can do to the overall growth rate of sunflowers seeds at different levels of exposure.
- 0140:** Mitchell MacDougall. *Trouble In Tanzania: A Look At The Plight of People With Albinism*
A deeper look into the struggles and dangers that people with albinism face in the country of Tanzania in Africa.
- 0141:** Vincent Pavill, Joseph Hall, Anthony LaTorre. *Making Mjolnir: An experiment with electromagnetivity*
This is a poster about the creation of an electromagnetic Thor's Hammer, named Mjolnir. Along with the poster there will be two physical hammers to accompany our display
- 0142:** Bradley McGinty, Bradley McGinty. *Effects of proper calibration on an Ion Implant System*
Ion Implant system and the effects of calibrating its sub-systems.
- 0143:** Miranda Pace. *Equal in Dignity?*
Reviewing the film The Danish Girl and putting it in a modern context of gender and human rights.
- 0144:** Austin O'Reilly. *Common Garden Experiment*
A common garden experiment, is an experiment to test the effect of environment by moving two species from their native environments into a common environment.
- 0145:** Cary Vailes. *Advantages and Disadvantages of Social Media*
Social media allows individuals, like you and I, to share our many ideas and thoughts through many formats. But is that all they're good for? Are there any negatives to using social media? This research explores what advantages and disadvantages to using social media gives us.



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