

EAST STROUDSBURG UNIVERSITY OF PENNSYLVANIA

**2016 Student Research
and Creative Activity
SYMPOSIUM**

April 21, 2016



A MEMBER OF THE PENNSYLVANIA STATE SYSTEM OF HIGHER EDUCATION

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*“Education is the most powerful weapon
which you can use to
change the world.”*

— Nelson Mandela

WELCOME TO EAST STROUDSBURG UNIVERSITY'S STUDENT RESEARCH AND CREATIVE ACTIVITY SYMPOSIUM

The Fourth Annual Student Research and Creative Activity Symposium brings together the ESU community to celebrate the accomplishments of students from disciplines throughout the university. We get to see concrete signs of ESU students' grit and talent. We witness the dedication and expertise of ESU professors and staff who selflessly mentor students. We can see our students as the creative and critical problem solvers they are. Thus, the Student Research and Creative Activity Symposium provides us with a glimpse of what the future holds for our future Warrior Alumni.

— Kevin Quintero and Bonnie Green, Committee Co-chairs

“The function of education is to teach one to think intensively and to think critically.
Intelligence plus character —
that is the goal of true education.”

— *Martin Luther King, Jr.*

SCHEDULE OF EVENTS

POSTER PRESENTATIONS.....PAGE 2

1st Floor Lobby

- 9:30 a.m.–11:00 a.m. - Session A
- 12:00 p.m.–1:30 p.m. - Session B
- 2:00 p.m.–3:30 p.m. - Session C

ORAL PRESENTATIONS.....PAGE 17

PERFORMANCESPAGE 25

1st Floor Lobby

When You Refuse to Reuse, It's Our Earth You Abuse: Students from Art + Design sculpture class

Bendables: *Bending Wood Through Laser Cutting*

SIGMA XI POSTER PRESENTATIONSPAGE 26

SIGMA XI ORAL PRESENTATIONS.....PAGE 28

SPECIAL EXHIBITSPAGE 31

Select scenes from the Theatre Department's current production, *for colored girls who have considered suicide when the rainbow is enuf*

Entrepreneurship Panel: *Students share their experiences in entrepreneurship, developing solutions for organizations external to ESU.*

Student Teacher Forum: *Students from the Professional & Secondary Education Department share their experiences in the classroom.*

6:30 p.m. – 7:30 p.m.

KEYNOTE ADDRESS.....PAGE 1

Niedbala Auditorium

A More Elevating Approach to Education

Josh Aronson, Ph.D.

*Professor of Developmental, Social, and Educational Psychology
New York University*

“An investment in *knowledge* pays the best interest.”

— *Benjamin Franklin*

KEYNOTE SPEAKER

Josh Aronson, Ph.D.

Associate Professor of Developmental, Social, and Educational Psychology
New York University



A More Elevating Approach to Education

How can we address achievement gaps in American schools? In this talk I will familiarize you with some of the psychology that ordinary schools in America have used to make themselves extraordinary. In these schools, test scores are high, students are happy, teachers love their jobs, and visitors want to enroll their own children.

Researching these “elevating” environments suggests that the key to success is responding to children’s social and psychological needs in ways that have been verified over and over again by psychological research, but in a way that has the potential to transform communities in the process of lifting test scores and grades. A critical ingredient in this process is an emotion called “elevation.” I will present experimental evidence to support this argument.

Josh Aronson, Ph.D., is an associate professor of applied psychology at NYU whose research has studied stereotyping, race and social class, and the social psychology of education. In 1995, he published a breakthrough study on “stereotype threat,” wherein people who are aware of the stereotypes associated with them try to skew their behavior to avoid confirming that stereotype. In an academic context, stereotype threats can undermine academic performance by placing undue pressure on students to disprove racial stereotypes while completing a major test. What his study showed was that mitigating stereotype threats freed students’ working memory and led to dramatically higher test scores. He is currently the editor of “Improving Academic Achievement: Impact of Psychological Factors” and coeditor of “Readings of the Social Animal;” and his current research explores methods for educators to improve learning and test performance for underachieving students.



POSTER SESSION A, 9:30 - 11:00 A.M.

ART + DESIGN

Presenter(s)	Title	Abstract	Adviser	Location
Morgan Kasey Weissbach	Creating a Creature	The process by which a concept design is created. It will show steps including the use of references, the sketching process, and the photo by photo finalization of the project.	David Mazure	1

ATHLETIC TRAINING

Presenter(s)	Title	Abstract	Adviser	Location
Matthew Kabay	Athletic Trainers' Clinical Use of Functional Movement Assessments	Objective: The purpose of this study was to determine what functional movement assessment tools and tasks athletic trainers use in the clinical setting, and ascertain if they are collecting baseline functional data to determine the athlete's rehabilitation progression and return to play decisions (RTP). Design: Randomized qualitative analysis survey. Setting: Online survey. Participants: Clinically practicing athletic trainers. Outcomes Measures: Functional movement variables were determined using frequencies. MANOVA test was used to compare functional movement variables between responses. Conclusion: This research will establish that athletic trainers using baseline functional movement do not implement their results for rehabilitation progression or RTP.	Scott Dietrich	2
Amanda N. Stopinski, Jane McDevitt, Keith Vanic, & Scott Dietrich	How are Athletic Trainers Assessing and Managing Concussion at the Middle School Level?	The pediatric population is at risk of concussions due to immature musculature, developing brain/skeleton, and poor motor skills. Additionally, this population lacks athletic trainers. Proper concussion diagnosis and management requires a multifaceted approach; however, athletic trainers at middle schools may lack these tools. We compared middle schools' protocols to their athlete's recovery times. The hypothesis was those with a diverse set of tools will have a slower return to play than those with few tools. The results will provide evidence that this population needs athletic trainers, and which set of tools, provides the best return to play plan.	Jane McDevitt	3

BIOLOGICAL SCIENCES

Presenter(s)	Title	Abstract	Adviser	Location
Caitlyn Collins & Jessica Kurtz	Comparison of Knowledge about Horseshoe Crabs Based on Proximity to the Shore	Horseshoe crabs are a very important organism that many people encounter in the eastern U.S. but do not know much about. The goal of this survey is to establish how much New Jersey residents know about these marine organisms and whether or not information provided about their importance will help increase awareness. Two groups, one near the shore and one away, were chosen to compare horseshoe crabs. The results from the survey will be analyzed and presented.	James Hunt	4
Lauren Brennan	Water Quality Monitoring Using Macroinvertebrates as Biological Indicators in Pocono Mountain Streams	While physical and chemical data can be gathered for a stream, these are not the only ways to measure its health. It is often helpful to use a bioindicator, in this case we used macroinvertebrates. The macroinvertebrate community composition and diversity in a system can tell us a substantial amount about a given stream. For example, macroinvertebrate families vary in their pollution sensitivity helping us assess overall stream health. Benthic macroinvertebrates are the foundation of the food webs in most aquatic systems. If decline occurs in these organisms, most others will also suffer (Poretti, Bryson, Miller, 2007)	Paul Wilson	5

BUSINESS MANAGEMENT

Presenter(s)	Title	Abstract	Adviser	Location
Randall Burgos-Cruz	CSI and Auditing	This poster presentation will display the role of Forensic Accounting in Criminal Science Investigation, elements of Accounting and Auditing will be presented, as well as their relationship to Criminal Justice in investigations and court cases. The Accounting Concentration of Business Management prepares students for more than just bookkeeping.	David Daniel	6
Mary Drake, & Alyssa Stettler	Using classroom knowledge in a IRS sponsored community service project	After completing MGT 335, Tax Accounting 1, students are encouraged to participate in the IRS sponsored Volunteer Income Tax Assistance (VITA) program. Students are trained as tax preparers using IRS developed materials. Once certified, students spend approximately three hours per week supervised by faculty who are Certified Public Accountants and prepare tax returns for members of the local community. Community members must meet income level and income-type requirements. So far in 2016, ESU students have prepared returns that generated over \$109,000 in refunds to taxpayers in Monroe and the surrounding counties.	Sheila Handy	7

COMMUNICATION

Presenter(s)	Title	Abstract	Adviser	Location
Ja'nese L. Felder	When do female athletes make it to the cover of Sports Illustrated?	Even though the participation of females in sport has increased, the amount of media coverage that they receive is drastically low compared to males. This study was a content analysis of Sports Illustrated magazine covers, comparing the years 1972- 1973 which is during the time Title IX was passed through legislation and more recent years 2013- 2014. Surprisingly, females were pictured more on the covers in 1972-1973.	Patricia Kennedy	12
John Lipowitch	"He said what?":Analyzing CNN's coverage of Donald Trump's 2016 presidential primary campaign or Media Coverage in the 2016 U.S. Presidential Primary: Analyzing CNN's coverage of Donald Trump	The objective of this study is to analyze the way the media, specifically CNN, frames Presidential Candidate, Donald Trump, through headlines, photos, captions, advertisements, and words in the mediums coverage of the primary election. Preliminary findings indicate that Trump receives nearly double the publicity and coverage from CNN than the leading Democratic candidates. The author theorizes that CNN's extensive coverage of Trump enables him to be framed differently for various other media audiences, which, in turn, contributes to his campaign and poll numbers.	Patricia Kennedy	9
Melissa Ciment	Women in leadership: A pilot study of gender distribution in executive positions in higher education administration in Pennsylvania schools	The purpose of this study was to assess if there is a correlation between the total enrollment of colleges and universities, and the gender of the President and Provost. The category of each school- secular, non-secular, PASSHE, and public- was also used to determine a pattern for females in the administrative roles of President and Provost. Higher Education administration in Pennsylvania remains dominated by males, however, women are slowly starting to make their way to the top.	Patricia Kennedy	10
Jillian Deiley	"I'll See You on the Dark Side of the Moon;" A Glimpse into the Listener's Band that is Playing other Tunes	This case study will apply the workings of the Uses and Gratifications theory to Pink Floyd's 1973 album, Dark Side of the Moon. It explores why listeners are motivated to listen to the album including their antecedents for motivation, the gratifications they are seeking, and what gratifications they actually receive after listening to the album.	Robert McKenzie	11

COMPUTER SCIENCE

Presenter(s)	Title	Abstract	Adviser	Location
Zuqing Li & Pingsheng Gao	Solving the Subgraph Isomorphism Problem Using Simulated Annealing and Evolutionary Algorithms	Subgraph isomorphism problem, which is to discover the subgraph of a large graph that is isomorphic to a small input graph. The subgraph isomorphism problem is inherently a NP-hard problem, thus an exact algorithm is impossible when graphs are huge, which are the cases these days. In this study, we reported the implementation of three heuristic optimization algorithms: simulated annealing (SA), (1+1) evolutionary algorithm, and genetic algorithm (GA). We applied these algorithms on randomly generated graphs for identifying the isomorphic subgraphs, and compared the performance of these three algorithms.	Dongsheng Che	12

DIGITAL MEDIA TECHNOLOGIES

Presenter(s)	Title	Abstract	Adviser	Location
Kourtney Lark, Ashley Chell, Karisa Glassmoyer, Cierra Marks & Ashley Taggart	"Assessing the Value of the E with J Scholars Partnership – a Service Learning Project"	In understanding the challenges poverty on education, the E with J Scholars tutoring program was created as a means to improve academic achievement and engagement with students from an economically underprivileged environment. The goal was to develop instructional methods for ESU tutors to use with culturally diverse 3rd-5th grade students with varied emotional and academic needs. As an initiative between several departments, multiple tactile and technological learning strategies were implemented. Surveys and journals of tutors and students alike from several semesters indicate perceived benefits by both ESU students and Elementary students groups.	Beth Sockman	13
Kelly O'Donnell	Attitudes towards Technology of Youth Services Library Staff Vs. Adult Services Library Staff in the Public Library	Most librarians agree that technology is very important in libraries but there is also a feeling of unease and discomfort when dealing with it. Librarians will use or intend to use technology more often in their jobs if they feel comfortable with that technology or believe it's beneficial to patrons. Many libraries are using tech with young patrons however when helping older members, technology is not always as accessible. Although technology in education is increasing, there is more to be desired in educating librarians about technology through training and a good support system.	Carol Walker	14

EARLY CHILDHOOD & ELEMENTARY EDUCATION

Presenter(s)	Title	Abstract	Adviser	Location
Lori Trachta	Effects of using inquiry-based learning on science achievement test on third-grade students	This research study's purpose is to find how teaching science in an inquiry-based learning style will affect the students' scores on a science achievement test. Inquiry-based learning includes hands on learning techniques, which involve experiments, technology, activities, and social interactions. I will be conducting a quantitative, quasi-experiment in a class of 21 third grade students. The ages range from 8 to 9 years old. In my experiment I will be teaching a unit on electricity, using inquiry based learning. The students will take a pre-test before the unit and a post-test after to measure their growth.	Craig Wilson	15
Sarah A. Shaffer	The Effects of Manipulatives on the Mathematics Achievement of First Grade Students	The purpose of the study was to determine if utilizing math manipulatives in an elementary classroom would increase student achievement. The research was completed with one first grade math class at Pleasant Valley Elementary School. The class consists of twenty-two first grade students, made up of eleven boys and eleven girls. This action research study involved a pretest and a posttest. The treatment involved students learning through manipulatives during five lessons over the course of five school days. Posttest scores will be compared to pretest scores to determine the effectiveness of students learning through manipulatives during a math class.	Craig Wilson	16
Jennifer Searfoss	The Effects of Inquiry-Based Learning Method on Kindergarten Students' Science Achievement	The purpose of this study is to investigate the effects of inquiry-based learning method on kindergarten students' science achievement. This study will be conducted with 19 kindergarteners. The design of the study is quasi-experimental pretest-posttest design. Participants will be instructed on the life cycle of chickens using inquiry-based learning method over a period of a week. A pretest will be given prior to implementing the unit and a posttest will be given following the completion of the unit. Pretest scores and posttest scores will be compared to determine the achievement of students after participation in an inquiry-based learning method.	Craig Wilson	17
Samantha Manento	The Effects of Inquiry Based Instruction on the Science Achievement of Second Grade Students	The purpose of this study is to investigate the effects of inquiry based instruction on the science achievement of second grade students over a 2 week period. A total of twenty-one second grade students will be involved in the study. These are students that I am currently teaching in my fourth quarter placement for student teaching. This will be a quasi-experimental study that will involve a pre-test and post-test design using one group of students. Gain scores from pre-test to post-test will be used to determine the effects of inquiry-based instruction on the science achievement of second grade students.	Craig Wilson	18

MARINE SCIENCE

Presenter(s)	Title	Abstract	Adviser	Location
Jenna Dudek	The Biological and Chemical Effects of Dredging on the Marine Environment near Avalon, NJ	New Jersey coastal waterways have experienced increasing boat traffic. Over the past few years, there has been an ongoing back bay dredging project in Avalon, NJ, in order to allow boats easier access through local waterways. Dredging can impact the biological and chemical environment. This project investigates the impacts of dredging on the marine environment at a dredging site near Avalon, NJ, as compared to a nearby non-dredged site. Water and sediment samples were collected at the two locations and analyzed. This presentation will provide information about dredging along with sample analysis and results.	James Hunt	19
Samantha DeVivo & Kelsey Lund	Environmental Issues and the Cruise Ship Industry	The cruise ship industry caters to 20 million passengers worldwide every year. Ships full of tourist can have negative impacts on coral reefs and marine ecosystems. Such impacts include: anchors, pollution, changes in wildlife behavior, and introduction of invasive species. Frequently, cruise ships negatively affect the long-term economy of their port destinations. This study examined the knowledge of environmental impacts due to the cruise ship industry. A survey-based study of non-marine sciences majors reviewed and reported on the knowledge of the environmental issues caused by cruise ships. Data from this study will be analyzed and presented.	James Hunt	20
Marina Zannino	The Biology and Conservation of Sea Cucumbers	Most species of sea cucumbers or Holothuroidea dwell on the ocean floor. Their geography is cosmopolitan. This study focused on the populations off the coast of California and around the Hawaiian islands. Over the years, sea cucumber have been harvested for food and ancient medicinal purposes in Asian countries. However, because of a lack of knowledge of their biology, the over harvesting of these creatures is mostly ignored. The goal of this study is to educate biology and marine biology students on this topic. Information on the biology, ecology, and conservation of sea cucumbers will be presented.	James Hunt	21
Katrina Zadoyko & Jennifer Soto	Conservation by Informed Consumption	This project provides details about several commonly used products and practices that cause damage to marine environments. The information was presented to high school students who took a preliminary exam followed by two post exams. The presentation demonstrated to students how individual choices impact the world around us and how relatively small changes can make a big difference. The exam results will be presented and discussed at the symposium.	James Hunt	22

PROFESSIONAL & SECONDARY EDUCATION

Presenter(s)	Title	Abstract	Adviser	Location
Jerika-Jem Velazquez, Zeynepa Zaimova, Christina Borghese, & Ben	Workplace Skill Development in Service Learning	The creation and validation of a measure of workplace skill development in service learning. We have created and validated a measure designed to be used to evaluate the effectiveness of service learning. The measure is specifically designed to capture an individual's workplace skill development which is believed to benefit by an experience in service learning. Test construction and validation processes and results will be discussed.	Bonnie Green	24

PSYCHOLOGY

Presenter(s)	Title	Abstract	Adviser	Location
Kaitlyn Dietrich, Shannon Condello, Destany LaBar, Sam Reilly, Adannia Ufondu & Keith Young-Smith	The Effects of Financial Aid Attitudes, Behaviors, and Cognition of Student Retention	There is reason to believe that students' attitude, behavior, and knowledge of financial aid is associated with college retention, however no measure exists. We created and validated such a measure. A survey was given to 160 college students aimed at measuring their attitudes, behaviors, and cognition towards financial aid. Instead, of the three proposed constructs, we identified 3 more complex constructs: behavior associated with obtaining knowledge, emotionality associated with finances, and making decisions based on the future, which accounted for 55.75% of the variance seen in the measure. Implications and future uses of this measure will be discussed.	Bonnie Green	24
Julia Nikolajuk, Erin Rubendall & Tasha Wehrenberg	Financial Literacy in First Year Experience Students	The purpose of this study was to find out how much college freshmen knew about finances, then prepare the participants for the financial world through the means of a symposium and workshops. A survey was administered to 260 freshman students enrolled in a First Year Experience course at East Stroudsburg University. Participants also attended a symposium, which taught them about loans, interest rates, and credit card usage. Following the symposium, research assistants held workshops to help students develop money management skills through the budgeting board game, "Budget Mania." Male students showed a stronger knowledge in the financial world.	Irina Khusid	25

SIGMA XI

Presenter(s)	Title	Abstract	Adviser	Location
Lauren Sarnese	Using morphology, geography, and seasonality to help distinguish three "entities" in the treehopper genus <i>Telamona</i> (Insecta: Hemiptera: Membracidae: Telamonini)	Using morphology, geography, and seasonality to help distinguish three "entities" in the treehopper genus <i>Telamona</i> (Insecta: Hemiptera: Membracidae: Telamonini). Treehoppers, sap-sucking insects in the family Membracidae, are often characterized by their strangely shaped pronotal (first section of the thorax) features. This examination compared the morphology, distribution, and seasonality of three entities in the genus <i>Telamona</i> that have been labeled "taxonomically uncertain" in order to improve clarity. The results show that all three entities could be separate species.	Matthew Wallace	144

SPORT MANAGEMENT

Presenter(s)	Title	Abstract	Adviser	Location
Faith Robinson	The effects of physical fitness and self-esteem on collegiate athletes	The fall semester of 2014 as an undergraduate student at East Stroudsburg University my internship was held at Lafayette College in Easton, Pennsylvania. While at Lafayette I interned with the sport performance department. The sport performance worked with all athletes. I will be researching the effects of physical fitness on collegiate athletes as well as the effects of self-esteem.	Jaedeock Lee	26

THEATRE

Presenter(s)	Title	Abstract	Adviser	Location
Emma McDonough	The Revolutionary Pina Bausch	Pina Bausch, the world renowned German dance teacher, choreographer, ballet instructor, and modern dancer, revolutionized the field of modern dance with her unique style, blending sound, movement, and elaborate sets, as well as her careful collaborations with performers while putting together a piece. Bausch created the Tanztheater Wuppertal, an experimental dance studio and theatre that performs internationally. She has received multiple awards and her work has been featured as a highlight in the 2012 Olympic Games in London. Bausch influenced many pop culture icons, such as musician and actor David Bowie and the hit television series, American Horror Story.	Margaret Ball	27

THEATRE (CONTINUED)

Presenter(s)	Title	Abstract	Adviser	Location
Alex Misurella	Women in Theatre: Stroman Saddles Up For Oklahoma!	This project is an examination of choreographer Susan Stroman, and her work on the critically acclaimed Rodgers and Hammerstein musical Oklahoma! (1998) I explore her upbringing, and compare her choreographing style to that of Agnes de Mille, who first originated the choreography (1943). Despite their various differences both women took great strides in pursuing their passions: de Mille fought for her ideas in a male dominated profession, and Stroman took on the arduous task of restaging de Mille's iconic choreography.	Margaret Ball	28
David Kunz	Sound Design for Jackie & Me	For ESU's fall children's show, we produced Stephen Deitz's Jackie & Me, which I had the opportunity to Sound Design. My job was to create the sound scape, which includes music- both transitional and underscoring, as well as sound effects. My intention was to use music from the time period being portrayed on stage to give the audience a more complete illusion of time travel. I did this by researching both contemporary music and popular music from the 1940's, including pieces by Benny Goodman, Count Basie, Artie Shaw, and more.	Yoshi Tanokura	29

POSTER SESSION B, 12:00–1:30 P.M.

ART + DESIGN

Presenter(s)	Title	Abstract	Adviser	Location
Sam Tabshi	3-D Printing Prosthetics	This is a research poster on the newly and advancing technology in 3-D printing prosthesis. Displaying benefits, effectiveness, and costs of 3-D printed prosthesis compare to traditional prosthesis.	Jocelyn Kolb	1
Evelyn Barone	3D Printed Microscopy	This semester I have been working on designing and printing diatoms (microscopic organisms). While they form the basis of most aquatic food chains most people don't even know they exist. Through this project I hope to show people the beauty and importance of the things we can't see.	Darlene Farris-LaBar	2
Sarah Shiner	Tarot Card Deck Capstone	This project explores the relationship between the two degree paths I have worked toward: a dual BFA in Graphic Design and Studio Arts, and a BS in Marketing. My goal was to digitally illustrate, manufacture, package, and market a deck of tarot cards. The overall inspiration came from two very different places. The color scheme and visual form interaction was inspired by vintage t shirt prints and futuristic looking line work, respectively.	David Mazure, Darlene Farris-LaBar	3

BIOLOGICAL SCIENCES

Presenter(s)	Title	Abstract	Adviser	Location
Ian Hartman	Identification of Pathogens in Trapped Red Foxes	Fifteen red foxes, one muskrat and one raccoon that were trapped in north NJ were tested for pathogens using PCR techniques at the ESU Wildlife DNA Laboratory. Spleens were excised and DNA was extracted. All tested negative for Babesia, Rickettsia, Anaplasma, and Bartonella but a positive for Mycoplasma was detected. I'm planning on sequencing the positive to confirm the identity of the pathogen. It may be the first detection of Mycoplasma present in Vulpes vulpes spleen.	Jane Huffman, Howard Whidden	4

COMMUNICATION

Presenter(s)	Title	Abstract	Adviser	Location
Kelly Granillo	The Hollywood Reporter: Using Powerhouse Status to Add Fire to Current Racial Issues	The Hollywood Reporter magazine is a well-established, prestigious magazine. This self-proclaimed "influential voice of entertainment" circulates about 70 thousand copies a year around the world. This study examined Reporter covers from different years around in the Academy award season, analyzing the captions of each cover with the objective of measuring any changes that would indicate a response to the increasing diversity in the entertainment industries.	Patricia Kennedy	5
Shantele Burton	I want to be that Bad B****!: A Content Analysis of African- American Women's Behaviors and Appearances in Reality Television	Reality television shows have become a popular choice of entertainment on cable networks. Selected African- American characters from reality shows such as, Bad Girls Club, and the series of Love and Hip- Hop will be analyzed. The positive image of African- American women is being threatened by the bad girl narrative increasingly attractive to young African American women.	Patricia Kennedy	6
Brittany Barnes	"We Fight or We Die": A Look at The Walking Dead's Rick Grimes as a Consequentialist Anti-Hero	This study explores the "anti-hero" phenomenon within popular culture and why fans enjoy "anti-hero" narratives by focusing on The Walking Dead's Rick Grimes. The study examines Rick's journey from modern hero to homicidal dictator, identifying the characteristics that depict him as a caring man and a villainous anti-hero who justifies his behavior with an "ends justify the means" (i.e., consequentialist) philosophy. The study reviews a fan forum to understand how a character, who would otherwise be hated, is loved. Fans recognize Rick as a dark, unscrupulous, revenge-seeking, distrustful, and bloodthirsty, yet admirable, character.	Patricia Kennedy	7
Brittany Winfield	Sleepless in Seattle: A study of occupational power differentials within the script among romantic couples on Grey's Anatomy	By the narrative arc in television scripts, Social Learning Theory suggests viewers will learn about gender roles. This study examines variables within the Grey's Anatomy's scripts that inscribe power between and among romantic couples who work together in this professional setting. One important finding was couples will restate their job titles in personal, even intimate, settings to establish power within the relationship. As issues of feminism become more prevalent in popular culture, this study supports arguments that popular television shows should adapt plotlines that empower women to focus on their careers and not use sex to get ahead.	Patricia Kennedy	8
Louis Wein	Use of Dramatism in Theatre and Communications	This paper uses Kenneth Burke's rhetorical theory of Dramatism to look at why we as a society feel the need to create reality from fiction. It also looks at the uses of Dramatism and the Dramatistic Pentad as a way to understand interpersonal and group communication. The paper looks specifically at musical theatre. I looked at the Broadway musical "Wicked" and various others on scopes of character development to product placement that underline the uses of Dramatism in this form of communication.	Andrea McClanahan	9
Melissa Valentovic	"Last Week Tonight", Competing Against Traditional News and Representing Hospitality	This paper compares the political satire, "news", HBO show, "Last Week Tonight", with traditional news. Also, the ideas Oliver has regarding migrants and refugees in one episodes closely align with those of Jacques Derrida in his speech, "Of Hospitality."	Cem Zeytinoglu	10

COMPUTER SCIENCE

Presenter(s)	Title	Abstract	Adviser	Location
John Tobin	Glassfish alternatives	I am building a lab for computer science in room 363. It is essentially 35 rack mounted servers running linux. I have my own "research" network [10.99.7.xxx] and all 35 servers are on it. The computer services currently provided: 2 Apache webservers, a subversion server, a Git server, 4 database servers, a network machine, an Openldap server [authentication], DNS, with a mail server [postfix] and backup server planned. What I am working on right now is a set of Application servers using Glassfish! Application servers have many functions: Amazon runs their business on application servers.	Haklin Kimm, Mike Jochen	11

DIGITAL MEDIA TECHNOLOGIES

Presenter(s)	Title	Abstract	Adviser	Location
Nicole Palmasano	Killer Whales In Captivity	In my seminar class I have in the Digital Media Technologies department we did a research project and we had to pick a topic that interested us so I picked Killer Whales in captivity because I have always wondered as to why no one has done anything to get these whales out of Seaworld and I also wondered what other people think about these animals being kept captive. It was my goal to show evidence on how they don't belong captive while at the same time teaching my peers about these amazing creatures.	Beth Sockman	12
LaShondra Cherry	Technology in Education: The Integration of Technology in Language Learning	Most modern language courses are taught the same way-from the book and from homework exercises that are completed either on paper or online. Students do not normally practice their second language on their own, which could help them in their studies. Overall, technology is very useful in education. The application of technology in second language learning has been proven to be very helpful in students' learning. The research conducted is to see if students' utilization of technology has helped them in their modern language courses and with learning a second language in general.	Carol Walker	13

ENGLISH

Presenter(s)	Title	Abstract	Adviser	Location
Katelin Delano	Bridging the Divide: Using Dystopian Literature in the Secondary Education Classroom	This presentation will focus on using young adult literature in the high school classroom as a bridge to teach young learners to enjoy reading and, therefore, become lifelong readers themselves. Based on a five week unit plan, along with an annotated bibliography of sources on young adult literature, this presentation will showcase Roth's novel Divergent for its ability to teach students about themes such as death and alienation. By analyzing Divergent in the classroom, students can relate to teen characters and practice skills needed for deconstructing deeper novels, understanding traditional texts, and uncovering unknown strengths within themselves.	Sandra Eckard	14
Sarah Bockus	Chipotle Case Study	For my public relations writing class, we were asked to compare and contrast how the media has been covering Chipotle in the news since Fall 2015 vs. how Chipotle presents itself. I did this by analyzing news broadcasts and articles compared to Chipotle's website, its PR initiatives, the opening pages of its 2014 annual report, and several recent press releases. This project helped me to gain a better understanding of how PR professionals monitor news coverage (uncontrolled messages) and attempt to shape their own image (controlled messages).	Nancy VanArsdale	15

HEALTH STUDIES

Presenter(s)	Title	Abstract	Adviser	Location
Alpha, Seymound, Amofo-Danquah, Audrey A. Atkinson, Alyssa M. Cannici, Danielle N. Castaldo, Jozie A. Condit, Jessica M. Dabney Hurt, Marieyah O. Delcane, Jamie Detweiler, Deanna Dunnigan, Danielle Fox, Ashley E. Friedberg, Nicole H. Gaffney, Kayla Goodwin, Shakia A. Maclean, Ashley L. Marzolino, Eileen E. McMaster, Katherine A. Nguyen, Lynn N. O'Neill, Sarah E. Pizzo, Anthony D. Polanco, Andrea M. Ranger, Deanna M. Rossettini, Sarah C. Seabrooks, Carleen C. Stanlaw, Aubrey L. Stephenson, Shaquille N. Sudol, Ashley L. Tamburini, Madison L. Velez, Kathryn L. Williams & Tahlasia	A Classroom Without Walls: Grant Writing Collaboration with Public Health Organizations	Hlth 380 (Health-Project/Grant-Development) students have partnered with Pocono Healthsystems, Pocono-Alliance, and the United Way of MC in the development of a \$2,500,000 CMS proposal using the Accountable Health Communities Model to address mental health services disparities, food/housing insecurities, and gaps in the public transportation system. Students were assigned into work groups (e.g., three addressing transportation gaps; two addressing mental health service gaps; and one addressing food and housing insecurities). Students' posters will summarize the epidemiological profile demonstrating need, innovative strategies to address mental health services disparities, food/housing insecurities, and an Uber-Model to provide transportation for low-income residents.	Steve Godin	16

MARINE SCIENCE

Presenter(s)	Title	Abstract	Adviser	Location
Drew Costenbader, Jenna Dudek & Marc Rivas	Informational Lecture and Testing of ESU Professors on Sustainable vs. Unsustainable Seafood Products	Overfishing is a widespread problem throughout the world's oceans. The problem is exacerbated when the public is unaware of this issue. This study investigates the knowledge of ESU professors about overfishing. A survey was created to assess the professors' familiarity with the topic and was given to two separate groups of professors from different departments. Professors were deemed very knowledgeable within their discipline and considered educated about other areas such as seafood sustainability. This presentation will present information about overfishing along with a statistical analysis of the survey results.	James Hunt	17
Raushan Shahalemi & Karen Livingood	The Problem with Plastics	The world's oceans are faced with many threats today, including: rising temperatures, chemical pollutants, and trash. Plastics are ubiquitous at present because they are durable, and have many applications in day to day life. These are also the properties that make plastic so problematic in the natural world. Here we explore some of the impacts that plastics have had in the marine environment and possible solutions to lessen negative impacts. This presentation is part of an ongoing project to assess current knowledge and attitudes of the general public with regard to plastic pollution in our oceans.	James Hunt	18

MARINE SCIENCE (CONTINUED)

Presenter(s)	Title	Abstract	Adviser	Location
Leah Mitchell & Angelo Altimari-Falsone	An Analysis of The Delaware Water Gap Invertebrate Fauna: impacts on water quality	The Delaware River is a major waterway with a large watershed around it in the Mid-Atlantic region of the United States, and is home to many invertebrates. The abundance and types of invertebrates often help to determine water quality. We will be researching a few sections along the Delaware Water Gap in order to survey the invertebrates and determine water quality. This presentation will show how human influence on the river has impacted the water quality using data analysis.	James Hunt	19
Taylor Teel & Garrett Hysong	Raising Awareness about Tuna Conservation	The goal of this project is to raise awareness about tuna conservation issues. There are four major tuna species of commercial importance: skipjack, yellowfin, bigeye, and albacore. We are going to give out surveys to students about their attitudes regarding tuna conservation before the research presentation and after the presentation. Our goal is to have an impact on student outlook on tuna conservation.	James Hunt	20
Ariel Diehl, Kelsey Kagel & Sully Silva	Invasive Species	Invasive species are an environmental problem that affects all areas of the country, including East Stroudsburg, PA. Our project will focus on the effects of invasive species, locally and nationally. To inform the general public and the ESU student/faculty body, we will provide data and statistics and also ideas to help prevent the problem. Invasive species is a large environmental issue, yet many people remain unaware of the problem. This presentation will highlight local examples in an effort to raise awareness.	James Hunt	21
Katelyn Braune & Ryan McGonagle	Seasonal abundance of shark populations at Assateague, VA.	The goal of this project is to assess the population of elasmobranchs three miles offshore of Assateague Island, Virginia. The RV Parker from the Chincoteague Bay Field Station was used to perform monthly long lining surveys over a 6-month period. Further oceanographic equipment will be used to assess water quality parameters. The data will be statistically analyzed for a possible significant correlation between species and seasonality. This data will be given to several shark conservation programs to better assess elasmobranch populations.	James Hunt	22

SPEECH-LANGUAGE PATHOLOGY

Presenter(s)	Title	Abstract	Adviser	Location
Julie Rehrig & Ta-Jshenae Fields	Computer Tutoring to Enhance Undergraduate Student Interactions with Older Adults	Since 1999, ESU has been using computer training to increase undergraduate students' interactions with normally aging adults. Tutoring started as a group program to learn basic computer usage. After 6 years, attendees were in need of more individualized and varied help. Tutoring was shifted to a senior center and conducted in a one-on-one format. This continues to be a successful way to gain experience for the student and information desired by the older adult. Included in the presentation will be different tutoring formats, examples of content requested by attendees, accommodations made to adjust for learning differences, online sources of instruction.	Elaine Shuey	23

THEATRE

Presenter(s)	Title	Abstract	Adviser	Location
Rebecca Roeber	The Queen of Darkness: A Stage Manager's Role in Theatre	The purpose of my role as stage manager is to ensure the efficiency of a theatrical production. My duties include collaborating with the designers and directors of the production; recording blocking dictations, technical cues; delegating paperwork and rehearsal duties to assistant stage managers and production assistants; and calling cues during the run of the production. Without all these elements and a functional stage manager, any play would simply not go on. My presentation is the visual recording of all these aspects that took place over the course of the production of Jackie and Me.	Margaret Ball	24

THEATRE (CONTINUED)

Presenter(s)	Title	Abstract	Adviser	Location
Sara R. O'Donnell	Trude Rittman: Musical Theatre's Greatest Secret	Bringing Trude Rittman's world to life is no small task, as she has spent the majority of her professional career in the shadows of two of the most prestigious men in Musical Theatre history: Richard Rodgers and Oscar Hammerstein. Through research and a thorough exploration of Musical theatre, the following work will give a brief timeline of Rittman's life, her career in American Musical Theatre, and the unsung influences she had on the theatre we know today. This research will also question why she was hidden from the public eye, despite the work she accomplished alongside Rodgers and Hammerstein	Margaret Ball	25

SIGMA XI

Presenter(s)	Title	Abstract	Adviser	Location
Meghan Rabon & Ayatt Damra	Determination of thermodynamic parameters for the hydrolysis of PNPP using the van't Hoff equation	The catalysis of p-nitrophenylphosphate (PNPP) by the enzyme acid phosphatase is used frequently for undergraduate enzyme kinetic laboratories. When hydrolyzed, PNPP produces the yellow product p-nitrophenol (PNP), which has a high extinction coefficient at 405 nm. Small quantities of PNP can be measured and quantified using UV spectroscopy with Beer's Law. The focus of this work is to develop a protocol suitable for the undergraduate laboratory to determine the thermodynamic functions for this reaction using the van't Hoff equation. This allows for the comparison of PNPP hydrolysis both thermodynamically and kinetically.	Michelle Jones-Wilson	26
Kristy Harris	Screening for genetically modified organisms in USDA certified organic seeds	Food or plant products labeled as organic do not allow the presence of GMO DNA. The main organic certification agency in the United States is the USDA. Unfortunately, there are cases in which GMO DNA has spread into non-target plants. The aim of this project is to screen for possible GMO contamination in USDA certified organic vegetable seeds. Companies produce GMO's using standardized gene cassettes from viral DNA. Primers designed to amplify the gene cassette are used to determine the GMO status of the seed. This data should provide insight into the extent of GMO contamination in these seeds.	Maria Kitchens-Kintz	27
Sofiaiqbal Mirza	Assessment of Sexual Dimorphism in Migratory Bats	Many mammals exhibit sexual size dimorphism where one sex is significantly larger than the other. Some bat species exhibit dimorphism with females being larger than males. We assessed sexual size dimorphism in 3 species of migratory bats: the Eastern Red Bat, Hoary Bat, and Silver-haired Bat. We used digital calipers to measure limb bones and then used t-tests to compare bone lengths of males and females of each species. Preliminary results indicate female-biased sexual dimorphism in our samples.	Howard Whidden	28
Julia Nikolajuk, Erin Rubendall & Tasha Wehrenberg	A Comparison of Financial Literacy in First Year Experience Students and Upperclassmen	This study compared financial knowledge between college freshmen enrolled in First Year Experience courses and college upperclassmen enrolled in Business Management courses. The differences in shopping behaviors and credit card usage were also compared between genders in freshmen. Freshmen attended a presentation and played financial board games to learn about budgeting, finances, and common terminology associated with money. A survey was administered to 260 freshmen and 71 upperclassmen. Female freshmen reported more frequent shopping behaviors and had higher unpaid balances. Freshmen had higher financial literacy than upperclassmen, while upperclassmen had less frequent shopping behaviors and owned fewer credit cards.	Irina Khusid	29
Michael Laforgia, Larry Laubach, Elizabeth McGovern & Howard P. Whidden	Continued Monitoring of Bat Populations in the Delaware Water Gap National Recreation Area	The invasive disease White-nose Syndrome has devastated populations of bats in eastern North America. We continued long-term monitoring of bats in the Delaware Water Gap National Recreation Area. We recorded echolocation calls along 3 new transect routes in the park. We also counted bats emerging from maternity roosts to assess current population status. Along the transects, the majority of recorded bats continued to be Big Brown and Eastern Red bats. Little Brown and Tricolored bats were rarely detected and appear to have very restricted distributions in the park. Emergence counts suggest some successful reproduction of Little Brown Bats.	Howard Whidden	30

POSTER SESSION C, 2:00–3:30 P.M.

COMMUNICATION

Presenter(s)	Title	Abstract	Adviser	Location
Jansette Sumpter	Are mental illness and autism framed differently in the media?	This study examines the ways mental illness and autism have been represented in movies. Preliminary findings suggest these topics are represented in two different lights, with some forms of mental illness portrayed not only as negative, but sometimes even evil. In contrast, autism tends to be framed as an innocent disability. Genre, as well as, the era in which the movie was made appear to influence the framing of these two subjects. Finally, this study discusses if and how these representations may or may not affect societal beliefs.	Patricia Kennedy	1
Ryan Lewis	Old School vs. New School: A Content Analysis of ESPN.com Coverage of Sports Royalty and Emerging Stars	This study investigates how ESPN.com has treated older athletes and teams as compared with their younger or newer colleagues or competitors. The specific content examined includes randomly selected articles from ESPN.com's coverage of the NFL, the NBA, and the MLB, in particular, coverage of Peyton Manning vs. Cam Newton, the '95-96 Chicago Bulls vs. the 2015-16 Golden State Warriors, and BJ Upton vs. Mike Trout. Preliminary findings confirm that older players are treated differently than younger ones.	Patricia Kennedy	2
Yasmeen Shabazz	Contesting the Meanings of the Black Lives Matter Movement: Comparing Frames in Social Media to News Coverage	The unjustified killing of Trayvon Martin sparked the Black Lives Matter movement. This report examines differences in the narratives and attitudes expressed in selected social media with coverage in standard news sources. The author argues that the frames of news coverage, especially in the New York Times, more accurately represents the Black Lives Matter movement's goals.	Patricia Kennedy	3
Emily Arciprete	How much "Skin" in the TV series Skins?: Variation in Sexual Content between the U.K. and U.S Versions of the Show	This study investigates and identifies differences in the ways that cultural norms of sexuality are framed by comparing the U.S. and U.K versions of the same television drama series--Skins. The research analyzes how young adults deal with media, personal relationships, their responses to the love, sex and relationships. Preliminary findings suggest that sexuality is more graphically displayed in the U.K version than in the U.S. version. Framing theory and Social Cognitive theory were used as a guide in aiding the exploration of how each country's society differs in relation to the media that are exhibited.	Patricia Kennedy	4
Taylor Hutchings	"Shall I compare thee to a magazine cover model?": How Cosmopolitan frames beauty for women in 2015	Although beauty may be defined in many diverse ways in different eras, and by countries, by ethnic groups and by individuals, this study examines how beauty is symbolically defined and framed for women who are exposed to the covers of magazine covers, specifically Cosmopolitan magazine. The author reports the results of an analysis of the magazine covers of Cosmopolitan for the year of 2015, using different indicators to determine the publication's framing of beauty.	Patricia Kennedy	5
Radhia Adam	Behind the Burka	This research describes differences between the way that western and Middle Eastern media portray the social and personal values of their women as compared with what women say about themselves on selected social media sites. This research focuses specifically on women between the ages of 17 to 30 in the United States and the Middle East living in The United Arab Emirates. Anecdotal experience suggests that the data will reveal that women of the Emirates have more in common than differences with western women, but the assumptions they have of one another is what separates them.	Patricia Kennedy	6
Janese L. Felder	Behind the Bright Lights: An Exposure on the Summer Olympic Impact on Host Cities.	This study reports on three Summer Olympic host cities: Beijing, London, and Rio. It explores the ways the host cities are framed through the official Olympic website compared to the news articles posted on the New York Times website. The articles offer behind-the-scenes information on problems and obstacles the host cities are enduring while preparing for the mega-event. The three main aspects that are researched for each city are displacement of city residents, preexisting problems within the city, and the stadium usage after the Olympics. The beauty of the event hides the horror of preparation.	Patricia Kennedy	7

COMMUNICATION (CONTINUED)

Presenter(s)	Title	Abstract	Adviser	Location
Andrew Spina	The Coldest War of All: Media Coverage of the North Korean Conflict	The United States and South Korea have been at war with the Democratic People's Republic of Korea for over 50 years. The research focuses on media coverage in particular CNN, framing information about and available from North Korea. The author argues the background history of the war and current everyday events show this war being fought is the "coldest" war of all.	Patricia Kennedy	8
Taylor Kent	The 2015 Baltimore Riots as Seen Through Newspaper Headlines	This content analysis examines newspaper headline coverage of public responses in the immediate aftermath of the death of Freddie Gray, a young African-America man who died in April 2015 of spinal cord injuries while in the custody of the Baltimore police. This study compares two local daily newspapers – The Baltimore Sun and the Philadelphia Inquirer. Both papers have daily circulations of 150,000-170,000 within their respective metropolitan areas. Findings suggest some difference in way these two newspapers framed the riots that occurred in Baltimore in the period after Gray's tragic death.	Patricia Kennedy	9
Maria Sassane	It's All About Me!: Celebrity Instagram Advertising	Millions of people use the social media platform of Instagram. Studying advertisements that celebrities post onto their profiles is important because so many Instagram users could be influenced by what they see their favorite celebrities post. In the current study, content analysis was used to study the amount of times a celebrity posted a picture onto his or her own personal Instagram of an advertisement. The results indicate most of the celebrities selected a self-promotion advertisement to post on their Instagram profile.	Patricia Kennedy	10
Maria Sassane	A Content Analysis of Celebrities and How Much They Advertise on Their Own Personal Instagram Profiles	Millions of people around the world use the social media platform of Instagram. Studying advertisements that celebrities post onto their profiles is important because so many Instagram users could be influenced by what they see their favorite celebrities post. In the current study, content analysis was used to study the amount of times a celebrity posted a picture onto his or her own personal Instagram of an advertisement. The results indicate most of the celebrities selected a self-promotion advertisement to post on their Instagram profile.	Patricia Kennedy	11
Justin Raad	Contact sports doing business as usual?: A content analysis of how concussions have been framed in sports media	Films like the movie "Concussion" (2015) have raised awareness in the concerns of sports injuries and the potential for lifelong brain damage from sports injuries. This study compares the information in sports media to information given to you through the movie, as well as reports from recent scientific studies. The study offers background information about concussions and will be worked into different kinds of sports and why they are so severe in those sports. You'll also be reading about youth sports with ties to concussions too, after comparing the different injuries that happen in youth sports to professional sports.	Patricia Kennedy	12
Kelley Anne Stuetz	There Is No Space Like Your Space	Have you ever felt your significant other should just know what you are feeling? Or have you ever felt violated by someone by their body position and actions towards you? It is very common to feel awkward or uncomfortable in these nonverbal situations. By using Expectancy Violations Theory as a framework, I researched these questions extending our understanding of unexpected human interaction.	Andrea McClanahan	13

DIGITAL MEDIA TECHNOLOGIES

Presenter(s)	Title	Abstract	Adviser	Location
Briana VanBuskirk	Political Discourse and Social Media: Is there a Correlation between Social Media Use and Political Involvement?	In a world where many people are disconnected from political discussion and interaction, it is imperative to study the role of social media as a mainstream platform for political communication. The accessibility of information on the internet is a valuable asset in today's world. However, it is uncertain whether or not the general public uses social media to access political news. This research will examine the correlations between social media use and real world application of political knowledge. Whether we see individuals participating in discussions, watching videos, or sharing photos, the transfer of knowledge on social media is meaningful.	Carol Walker	14

DIGITAL MEDIA TECHNOLOGIES (CONTINUED)

Presenter(s)	Title	Abstract	Adviser	Location
Allison M. White	Utilizing Gaming in the Classroom	Research in a public school with minors is beneficial to school teachers who are revolutionizing their classrooms, becoming more student centered in their teaching. Neomillennials love games. Students have a much higher competitive drive than ever before, and enjoy the competition. This drive allows students to compete with academic information and success in the classroom. In this research, three eighth grade reading courses were studied. The students were split into two groups, both receiving the same lesson; however, only one utilized a review game to review. Students took a pre-test/post-test score, which indicated the effect of gaming on learning.	Carol Walker	15

EARLY CHILDHOOD & ELEMENTARY EDUCATION

Presenter(s)	Title	Abstract	Adviser	Location
Amanda Tomik	Transportation	This project will take place in the Head Start classroom located in Bushkill Elementary School. We will do a variety of activities that focus on all content areas of knowledge, and center around the theme of transportation. This includes read aloud activities, math lessons, and scientific explorations. We will also sing songs regarding different forms of transportation, as well as physical activities that promote gross motor development. The students are between the ages of three and five, but the class is comprised of mostly four-year-olds who will be turning five soon.	Nurun Begum	11
Katie Morris & Renee Brandel	Using Project Approach to Teach Bug in an Early Childhood Classroom	We will be implementing our project during our two weeks in our pre-k classroom. Over the time we are there we will teach the children about bugs through various activities. Such activities will include dramatic play, art, science, math, language arts, technology, physical education, a guest speaker and a field trip, all related to bugs. What we want to learn from the project will be planning and organizing lessons, classroom management, and behavior management. The outcomes of our teaching will be presented at the conference.	Nurun Begum	16
Jenna Peters & Kim-Marie Blagman	Knowing About Penguins	We are implementing the project in the Sunflower room at Pocono Family Services Headstart on West 4th St. in East Stroudsburg. The children there are mostly 4 or 5 years old. We will do math, science, music, physical education, dramatic play, reading, and writing/pre-writing activities all related to the central theme of penguins. At the end of the project, the children will have a general knowledge of penguins. The findings of this project will be presented in the conference.	Nurun Begum	17
Corinne Krieg	Understanding about Space of Young Children	I will implement the project at Pocono Head Start on Fourth Street in East Stroudsburg. The age Group will be 3-5 years old. While doing this project I expect to learn how to manage a preschool classroom. I will learn how to better teach a group of young children and keep them focused. The findings of this project will be presented in the conference.	Nurun Begum	18
Heather Baumeister & Maddie Boyer	Using Project Approach: Knowing About Oceans	Our two-week project is based off of the theme of oceans. This theme includes the animals, the characteristics, as well as how the ocean helps us. The project will be implemented at Paxinosa Elementary School. Activities that will be done in regards to oceans, are reading stories about different sea animals, making different sea animals out of different materials in art, math activities such as sea life bingo, and creating an ocean in the classroom. The findings of this project will be presented in the conference.	Nurun Begum	19
Breanne Giberson	Concept of the Children about Five Senses	I will be implementing my project in the Shining Stars room of the Pocono Head Start on West Fourth Street in East Stroudsburg. The age group I am working with is three to five year old and they will learn about their five senses and when and how we use them. We will do activities that are simple, yet help demonstrate the different senses through fun hands on learning. They will also learn when it is not appropriate to use one of their senses. The findings will be presented in the conference.	Nurun Begum	20

EARLY CHILDHOOD & ELEMENTARY EDUCATION (CONTINUED)

Presenter(s)	Title	Abstract	Adviser	Location
Jessica Ayala & Heather Williams	Concept of Recycling in Early Childhood Classroom	This two week project will be implemented at the Pocono HeadStart on West 4th Street in the Sunshine Room. The children in this classroom ages range from 3-5 years old. The activities we will do will consist of a song about recycling, a word wall consisting of words pertaining to recycling, a pre-writing activity where the children will practice writing the word "recycle" on bags with paint inside, a field trip to PEEC, and an art activity where we will be making something out of recycled materials. The findings of this project will be presented in the conference	Nurun Begum	21
Jillian Cozzubbo & Maggie Appezato	Using Project Approach in Early Childhood Class: Down in the Jungle	We will be doing a two weeks project at Saint Paul's Lutheran Church in Easton, PA and the age group that we will be working with is 3-5 year old. Different activities we will be doing during this 2-week project; the children will make different jungle animals out of paper plates (monkeys, frogs, zebra, lions). As a pre-writing activity they will practice drawing letters using a bag with paint inside. The finding of this project will be presented in poster paper format during the conference	Nurun Begum	22
Kelly McMaster	Multisensory	This study determines if multisensory instruction is more effective than traditional instruction. This study will explore the effects of using multisensory components on the phonemic awareness skills of kindergarteners. The participants will be randomly selected and receive fifteen minutes of daily instruction on phonemic awareness skills. The controlled group will use a traditional approach. The treatment group will use a multisensory approach by using visual, auditory, and kinesthetic senses. This will be a quasi-experimental action research design by using a same subject pretest and posttest. The gain scores of the tests will determine which teaching strategy is more effective.	Nurun Begum	23
Kelly Howiszak & Payton McBride	Using Project Approach: Gardening Saves the Earth	This project will be implemented at Northampton St Head Start in Easton, PA. The age group of the children will be ages 3-5. The activities we will do will include read aloud, teaching a song, pre-writing activities, math and exploration activities. The goal of this this project to help the children to understand the five basic facts about gardening. By implementing this project we will learn and understand how much time and effort goes into the planning part of being a teacher. We will also learn what approaches work best when working with the preschool level (ages 3-5).	Nurun Begum	24
Lyndsey Kremen & Cristina Coppola	Concept of Gardening in a Preschool Classroom	This project will be implemented at Resica Elementary School. The age group is four and five year old. In this project we will be teaching the students information related to gardening. The children will also be learning the purpose of gardening throughout the unit. The findings of this project will be presented at the conference.	Nurun Begum	25
Taneka Johnson	Cause and Effect	The effects of visual vs. non-visual instruction on 3rd grade inner-city students on cause and effect. I will have a series of activities and lessons that help the students to identify the cause and effect in reading. I found that students in this grade level tend to struggle with identifying cause and effect, I wanted to see if using visual or non-visuals while learning the strategy makes a difference. This unit of study will be over 5 days at Cheston Elementary with two groups that are from the same third grade class and live in Easton, Pennsylvania.	Nurun Begum	26

HEALTH STUDIES

Presenter(s)	Title	Abstract	Adviser	Location
Nicole Friedberg	The Geriatric Emergency Department Guidelines: A Comprehensive Literature Review Before and After Implementation	This research focuses on the issues facing elderly patients in Emergency Departments with a special focus on The Geriatric Emergency Guidelines. Research primarily draws upon secondary data to identify barriers to effective Emergency Department care that precipitated the implementation of policy change in 2013; to describe and summarize The Geriatric Emergency Department Guidelines; to review recent reports and conduct a process evaluation of changes after the 2013 implementation of the guidelines; and overall, propose a study to comprehensively assess implementation of the guidelines at a regional medical center. Research findings are summarized in a comprehensive literature review.	Clare Lenhart	27

MARINE SCIENCE

Presenter(s)	Title	Abstract	Adviser	Location
Ian Hartman & Allie Sicignano	Conservation in the Classroom: can we go Carbon Neutral?	Rapidly rising levels of greenhouse gasses are a global concern. As a conservation class, we should be focused on reducing our impact on the environment. The goal of this project was to assess the feasibility of offsetting our energy usage through behavior. An estimation of the energy used by our Marine Conservation class was performed. Data is being collected from students throughout the semester and an analysis of our results will be presented at the symposium.	James Hunt	28
Christopher Nicholson & Jason LoPiccolo	Sea Turtle Conservation: Past, Present, and Future	We will investigate Sea Turtle Conservation efforts and how they have changed throughout history. From the first documented encounters of humans with turtles to present day, we will look at how our role has changed. We will explore how much our surrounding community of students know about Sea Turtle Conservation by using a simple survey identifying the top endangered species and some basic conservation facts. We will present our findings on the common knowledge of our peers and community towards Sea Turtle Conservation and bring focus to some of their biggest threats in need of our intervention.	James Hunt	29
Alyssa Priester, Taylor Layden & Virmarie Soto	Climate Change Impacts on the Ocean	The increase of anthropogenic CO2 since the industrial revolution has contributed to ocean acidification and sea level rise. This study investigates student's attitudes toward their actions and awareness. We surveyed college students before and after giving a lecture, results from the survey will be analyzed and presented. Our display will be a poster of the information gathered, as well as the data of our analysis of the students' survey responses.	James Hunt	30

ORAL PRESENTATIONS

ACADEMIC ENRICHMENT & LEARNING

Presenter(s)	Title	Abstract	Adviser	Location	Time
Kerry Adams	Code-Switching in Higher Education Among African American Students: Culture and Communication	This study seeks to understand the experience of code-switching among African American students at a predominantly white institution of higher education. Code-switching, as defined by the Merriam-Webster dictionary is, "the switching from one linguistic system of one language or dialect to that of another." African American students engage in code-switching when they change their dialect from African American Vernacular English (AAVE) to Standard American English (SAE). This phenomenological study explores the perceptions African American students have about AAVE, SAE and academic success. It also looks at how these factors have impacted their transition experience to higher education.	Kelly McKenzie	145	2:00

ATHLETIC TRAINING

Presenter(s)	Title	Abstract	Adviser	Location	Time
Matthew Kabay	Athletic Trainers' Clinical Use of Functional Movement Assessments	Objective: The purpose of this study was to determine what functional movement assessment tools and tasks athletic trainers use in the clinical setting, and ascertain if they are collecting baseline functional data to determine the athlete's rehabilitation progression and return to play decisions (RTP). Design: Randomized qualitative analysis survey. Setting: Online survey. Participants: Clinically practicing athletic trainers. Outcomes Measures: Functional movement variables were determined using frequencies. MANOVA test was used to compare functional movement variables between responses. Conclusion: This research will establish that athletic trainers using baseline functional movement do not implement their results for rehabilitation progression or RTP.	Scott Dietrich	138	12:15
Ryan Smith, Jane K McDevitt, Wendy Dietrich & Gerard Rozea	Determining Reliability of a Novel Upper Extremity Balance Test with Thera-band Ball Compared to the Balance Error Scoring System	The Balance Error Scoring System (BESS) detects balance deficits following a concussion. It consists of 3 stances: double-leg stance, single-leg stance, and tandem stance, on 2 surfaces (firm and foam). Due to its ease of use, the BESS test has become an essential tool for clinicians deciding if a concussion has occurred. Studies have shown that ankle instability (AI) can cause BESS test scores to worsen; therefore, this test is not valid for people with AI. Consequently, there is a need for an Upper Extremity BESS (UE-BESS) test to determine balance deficits in this population following a concussion.	Jane McDevitt	117	11:30
Jennifer C Bokoski, Jane McDevitt, Keith Vanic & Scott Dietrich	Gaming Devices Leads to A New Generation of Concussion Recovery Tools	Upwards of 30% of concussed athletes report balance deficits at the time of injury; however, there are no tools sensitive enough to detect balance deficits during recovery. Two balance tests were utilized to detect sway during the athlete's recovery (i.e., Balance Error Scoring System using a force plate, Virtual Environment Traumatic Brain Injury Screen (VETS), using a Wii balance board). Then, sway areas between the tests were compared. Our hypothesis was, both sway areas would decrease; however, the VETS will provide a more sensitive detection of recovery. The results will deliver concussion rehabilitation tools to medical professionals.	Jane McDevitt	145	2:30
Nicole N Koniarz, Jane McDevitt, & Wendy Wheeler-Dietrich	Cystic Fibrosis Does Not Keep A Warrior Swimmer From Competing	A 20-year-old female collegiate swimmer was diagnosed failure to thrive at birth. A sweat test performed on her at 2 months old concluded results indicative of Cystic Fibrosis (CF). Her estimated life expectancy was approximately 12-years-old. She is currently on the lung transplant list (along with 463 other people) due to B. Cepacia. Most of the medications used to treat her CF are banned by the NCAA; her daily routine consists of a vibrating vest, a nebulizer, and her 14 medications. She presents with a rare, life-threatening condition yet competitively swims at a NCAA Division II institution.	Jane McDevitt	138	12:00
Kelly Barnes	The Effects of Kinesio Taping® on Pain and Functional Tests for Patients with Patellofemoral Pain Syndrome	Patellofemoral pain syndrome (PFPS) is common in active individuals with anterior knee pain. Kinesio® tape has become a common treatment of PFPS. To investigate the effects of Kinesio® tape, patients with PFPS were assessed for pain and functional performance under three testing conditions i.e. no tape, Kinesio® tape, sham Kinesio® tape. It was hypothesized that Kinesio® tape would provide significant improvements in pain and functional tests as compared to a sham application. Findings from this study may provide significant evidence for the use of Kinesio® tape for decreasing pain and increasing functional performance in individuals with PFPS.	Gerard Rozea	145	2:15

COMMUNICATION

Presenter(s)	Title	Abstract	Adviser	Location	Time
Steven Dume	Same Magazine Different Story: A Comparative Content Analysis of International Time Magazine Covers	This study compared international Time magazine covers released over the last decade. Findings suggest that the differences in frame stem from decisions about localization, both as a determinate of importance and an assessment of cultural norms.	Patricia Kennedy	138	11:00
Bari Antell	"Should I Stay or Should I Go?": A Close Analysis of the Visions of Domestic Violence in Internet Advertising .	This pilot study explored the ways that Internet-based ads aimed at curbing domestic violence frame the targets and perpetrators of these assaults and establish norms for how those exposed to these ads may view the topic. The author explores the intersection of theories of framing and the coordinated management of meaning, with the goal of adding research perspectives in the technological age.	Patricia Kennedy	138	1:00
John Groner	Hegemony and The New York Times	The objective of this pilot study was to explore the extent to which The New York Times reporting of the Supreme Court's Citizens United v. F.E.C. decision was fair and objective. A random selection of headlines was collected from 2010 [the year of the decision] through 2015. A content analysis of the headlines points to a general lack of coverage and an overall tone of insignificance toward the decision. The framing of an extremely important change to our campaign finance laws, as commonplace, suggests that the mass media operate as a tool of institutionalized elite corporate interests.	Patricia Kennedy	117	11:45
Steven Dume	"Why are you calling me a racist?" What media reports about the 2016 U.S. presidential candidates and information found on their respective campaign websites.	This study reports charges of racism found using Google against presidential candidates including: Hillary Clinton, Bernie Sanders, Donald Trump, and Ted Cruz. The author also reports the treatment of race related issues found on the candidates' personal campaign websites.	Patricia Kennedy	138	11:15
Ronald Hanaki	It's Still the Economy, Stupid! A Content Analysis of 2015 Presidential Primary Debates	This paper is a content analysis of all presidential primary debates held between August 6 to December 19, 2015 in order to assess whether the issues discussed in those debates actually correlate with what Americans felt were the biggest issues facing the country as determined by the Gallup polling organization. The study found strong correlation between the issues being discussed during the debates and the leading issues that Americans felt were the most important. Economic issues such as unemployment and jobs and taxes were the most salient issues followed by non-economic issues like ISIS / ISIL and immigration.	Patricia Kennedy	138	1:15
Chantal Fulgencio	Historically Black Colleges & Universities	This presentation seeks to provide comprehensive knowledge of Historically Black Colleges and Universities (HBCUs). The presentation will contribute to the attendee's understanding of the importance of these institutions where underrepresented students from all creeds can attain a higher education. It is important to discuss the historical and social significance of the HBCUs in this country. There are several challenges facing HBCUs today- challenges which range from their question of relevance and importance in an increasingly diverse and growing higher education environment. It is necessary now more than ever before to keep these institutions present in the educational narrative.	Andrea McClanahan	145	3:30

COMMUNICATION (CONTINUED)

Presenter(s)	Title	Abstract	Adviser	Location	Time
Ronald Hanaki	The Virtues of Piety: A Burkean Understanding of Antonin Scalia's Jurisprudence	Kenneth Burke was perhaps America's greatest expositor of language and its symbolic value. The Burkean lexicon is well-suited to understanding the late Justice Antonin Scalia's jurisprudence. Today, Scalia is remembered as a strict constructionist, and Scalia's fidelity – or in Burkean terms, piety – to originalism has been a cause célèbre among legal theorists. Originalism as an ideology can be appreciated as a terministic screen, but despite Scalia's alleged piety, the decision reached in the celebrated case of Bush v. Gore (2000) finds Scalia losing faith, and maybe not the pious believer in originalism as many have thought.	Cem Zeytinoglu	138	1:30

EARLY CHILDHOOD & ELEMENTARY EDUCATION

Presenter(s)	Title	Abstract	Adviser	Location	Time
Amanda Tomik	Transportation	This project will take place in the Head Start classroom located in Bushkill Elementary School. We will do a variety of activities that focus on all content areas of knowledge, and center around the theme of transportation. This includes read aloud activities, math lessons, and scientific explorations. We will also sing songs regarding different forms of transportation, as well as physical activities that promote gross motor development. The students are between the ages of three and five, but the class is comprised of mostly four-year-olds who will be turning five soon.	Nurun Begum	138	11:45

ENGLISH

Presenter(s)	Title	Abstract	Adviser	Location	Time
Ariel Tucci	Dominant Advertising	Advertisements set cultural norms; they sell much more than a product, they sell values success, image, normalcy, and hyper masculinity. We are overwhelmed by advertisements everywhere we go. It is unavoidable, turn on a television or radio and we are bombarded with the most up-to-date products. One common way to sell products is to use sex. Women's bodies are often transformed into aesthetics and dehumanized. Even if a person is not paying attention to the advertisement, they are still subconsciously receiving information, creating social norms. It has become a social norm to sexualize products to catch a buyer's eye.	Erica Dymond	117	12:00
Ariel Mickey	The Literature Found Within Literature: A study of more meaningful learning through Anime	This project explores the benefits of using Graphic Novels and Japanese animation within a classroom setting as a tool to introduce students to literature and higher learning. Specific popular titles that are relevant to today's youth are analyzed and broken down to bring attention to the classical literature parallels within the storyline, and their use of important representation that may not be seen in today's taught literature. These categories of representation are: Ethnic Diversity, Characters with disabilities, gender and sexual equality. By utilizing these pop-culture references, classrooms would welcome higher motivation from their students, and explore more meaningful learning.	Erica Dymond	117	12:15

HEALTH STUDIES

Presenter(s)	Title	Abstract	Adviser	Location	Time
Patrice Penrose	An Analysis of Healthcare Providers Adverse Childhood Experiences Screening Beliefs and Behaviors	Research has consistently demonstrated the devastating health effects that adverse childhood experiences (ACE) can cause well into adulthood. However, little has been done to effectively mitigate these effects. This project assesses how healthcare providers view their role in preventing the onset of adverse health by screening for ACE. Furthermore the research determines how the beliefs of healthcare providers on ACE relate to their subsequent screening behavior. We examine how healthcare providers and mental health workers view the effects of ACE, what they believe about the risks and benefits to screening, and how this relates to their actual screening behavior.	Jennifer Bleck	138	12:30

MATHEMATICS

Presenter(s)	Title	Abstract	Adviser	Location	Time
Adam N. Robertino & Ronald Hanaki, with the support of Katelin D. Becker, Christopher J. Cocuzza, Stephanie T. Cucinella, Briana L. Deemer, Frank E. Dyska, David L. Goldspinner, Laura L. Gulliver, Denis Halvadžhiev, Keri L. Hamlen, Kadeem L. Haskins, Maxwell Pagerie, Jacob T. Pisko, Stephanie A. Pollack, Corey J. Smith, William C. Swart, Kaitlynn N. Wiltraut & David M. Zettel	Show Me the Money: An Analysis of Fundraising Techniques for the United Way of Monroe County	The United Way of Monroe County needs a way to evaluate various fundraising approaches. The spring 2015 section of the Introduction to Mathematical Modeling class used math modeling techniques to assess several fundraising methods. These included direct mail, QR codes, billboards, text-based campaigns, table top advertising, television and online advertising, and grocery checkout donations. All options were evaluated on monetary costs and United Way personnel time costs versus revenue generating potential. This talk will focus on direct mail, billboards, text-based campaigns, and the use of QR codes.	Olivia Carducci	138	12:45

PHILOSOPHY & RELIGIOUS STUDIES

Presenter(s)	Title	Abstract	Adviser	Location	Time
Miranda Tripus, Thomas Rundell, Gregg Hanson	"What We Don't Know: The Role of Ignorance in Science, Philosophy, and Morality"	What role does ignorance play in the quest for knowledge? Socrates sought true knowledge but claimed he never found it; however, he did find ignorance. The scientific method also has an important place for ignorance. Science is largely a matter of questions, anomalies, and missing data. These compose the outer fringes of scientific knowledge and make up the momentum behind discovery. Ignorance affects our everyday lives as well. For instance, most people do not openly advocate for the suffering of non-human animals; yet most people contribute to such suffering by consuming animal products from factory farms.	Tim Connolly	138	1:45

POLITICAL SCIENCE

Presenter(s)	Title	Abstract	Adviser	Location	Time
Joseph M. Carr	Comparing Life for Syrian Refugees in Germany and Turkey	The purpose of this paper is to compare life for Syrian refugees in Germany and Turkey. This study will analyze data from both countries concerning healthcare, education, employment, and quality of life for Syrian refugees. The goal of this paper is to increase knowledge on how Germany and Turkey are aiding refugees from Syria.	Kimberly Adams	117	1:00
Blair Williams	Closing the Gap: Gender Stratification in STEM programs across the United States	The purpose of this research is to examine gender stratification of males and females awarded Ph.D.'s in STEM (Science, Technology, Engineering, Mathematics) programs. The first phase of this research consists of data analysis from all fifty states analyzing the percentage of males awarded Ph.D.'s in STEM programs in comparison to females awarded Ph.D.'s in STEM programs. The final phase of this research consists of three interviews with women who have been awarded professional degrees in STEM fields in an effort to compare the findings to the data analysis.	Kimberly Adams	117	1:15
Casandra DeStefano	Human Trafficking and Women around the World	A great deal of research has been done on the topic of Human Trafficking around the world to study variations in reporting within and among countries. Using an OLS regression analysis, this research examines human trafficking in over 90 countries and the impact of education, level of democracy and the gross domestic product, per capita (GDPPC). The early findings indicate that female access to secondary education significantly impacts the instances and reporting of human trafficking within a country.	Kimberly Adams	117	1:30
Nichole Burkhart	U.S House of Representatives and the support for LGBT+ Related Bills.	The Matthew Shepard Hate Crimes Act was voted on in the U.S House of Representatives on April 29, 2009. The law includes crime motivated by a victim's actual/perceived gender, sexual orientation, and disability. The research examines the U.S House of Representatives and the support for LGBT+ related bills. Using the OLS regression analysis the research investigates race, gender, and age. Democrats were significantly more likely to vote yes than Republicans. Minorities were significantly more likely to vote yes than white representatives. Women were more likely to vote yes than men. Age is not a significant variable.	Kimberly Adams	117	2:30
Ryan Lesane, Keisha Kauffman, Eli Downie, Christian Colon, Justin Watts & Lillian Grainger	An Analysis of Adam Benforado's work "Unfair: The New Science of Criminal Justice"	The panel/presentation will explore Adam Benforado's book "Unfair: The New Science of Criminal Justice." Specifically, students will discuss the author's primary message, how Benforado make his case that America's judicial system is unfair. Further, the students will discuss the strengths and weaknesses of the work and how the work altered their perceptions of the criminal justice process and the U.S. judicial system.	Kimberly Adams	117	2:45

PROFESSIONAL & SECONDARY EDUCATION

Presenter(s)	Title	Abstract	Adviser	Location	Time
Mary Genao	Spanish Heritage Language Learners: Meeting These Students' Unique Needs	More Spanish teachers are finding students in their classroom that have varying levels of Spanish skills due to use of the language at home. This two-part study looks at the unique needs of these students by listening to what their teachers have to say, and the positive impact separate Heritage Language classes have on the students' academic careers. The results show that there is a wide consensus among Spanish educators that Heritage Language Learners are best served in a separate class and that the students taking such classes tend to continue to study the language into more advanced levels.	James Vagliardo	Sci Tech Lobby	5:45

PSYCHOLOGY

Presenter(s)	Title	Abstract	Adviser	Location	Time
Ashley Lafontaine, Anna Corona, Taylor Yost, Collyn Dorney, Frank Roth, & Eileen Killian	The Creation and Validation of a measure of social / cultural integration in service learning	We have created and validated a measure designed to be used to evaluate the effectiveness of service learning. This measure is specifically designed to capture society/ cultural integration which is believed to benefit service learning by leading to diverse cultural awareness and understanding, to expand opportunities and build healthy communities, and by teaching the concept of global citizenship.	Bonnie Green	117	10:30
Chatiela Clark	My Career Path At The Career Development Center	Internships have been identified as a high impact practice for undergraduate students (Kuh, 2008). During Spring 2016 I served as a student intern at the East Stroudsburg University of Pennsylvania's Career Development Center. During my time here I have conducted research, reviewed data, conducted job analyses, reviewed resumes and cover letters, and implemented several projects for the programs "Success Series". I will be aligning my experiences with Kuh's theory. I will also be exhibiting what I learned, how my internship was beneficial to me and how it can be useful to someone on my same career path.	Bonnie Green	117	10:45
Ryan Flannery, Ariel Tucci, Robert Fetterly, Karissa Refsnider, Michalina Konopka & Edward Ellis	The creation and validation of a measure of the evaluation of self in service learning	Through a service learning project we have created and validated a measure designed to be used to evaluate the effectiveness of service learning. This measure is specifically designed to capture professional connections, confirmation of career and the application of knowledge, which is believed to benefit by explaining service learning. Professional connections are the connections made within the community. Confirmation of career is the self-evaluation and realization of skills, and establishes "faith" in your career choice. Application of knowledge is taking the information learned and apply it to our career. Test construction and validation processes and results will be discussed.	Bonnie Green	117	12:45
Gabriella Taliian, Iqra Mahmood, Carla Garis, Jesenia Rosario, Samara Gallagher & Bryanna Dennison	The Creation and Validation of a Measure of Self in Service Learning	We have created and validated a measure designed to be used to evaluate the effectiveness of service learning. This measure is specifically designed to capture empathy, confidence in self, and comfort with ambiguity, which is believed to benefit by experience in service learning. Lundy (2007) defined empathy as the ability to vicariously experience other's emotions. The self-confidence factor taps into processes linked to performance and levels in beliefs about events (Kleitman and Stankov, 2007). And Schmidt and DeShon (2010) described ambiguity as uncertainty concerning the true status of one's performance. Test construction, validation processes and results will be discussed.	Bonnie Green	117	11:00

PSYCHOLOGY (CONTINUED)

Presenter(s)	Title	Abstract	Adviser	Location	Time
Keith Young-Smith, Gerdwine Bourdeau, Nicole Parisi, Bryan Castner	Service Learning Program & Policy	We have created and validated a measure designed to be used to evaluate the effectiveness of service learning. This measure is specifically designed to capture Program and Policy, which is believed to play an important role in the service learning experience.	Bonnie Green	117	12:30
Dominika Douckova, Caitlin Leming, Michala Salowe, Samantha Shultz & Gina Santini	Service Learning: Student Motivation and Self Efficacy	The creation and validity of a measure of the individual themselves in service learning. We have created and validated a measure designed to be used to evaluate the effectiveness of service learning. The measure is specifically designed to capture how students approach goals, situations, and tasks through motivation and self-efficacy, which is believed to benefit by service learning. Test construction and validity processes and results will be discussed.	Bonnie Green	138	11:30

READING

Presenter(s)	Title	Abstract	Adviser	Location	Time
Students of the Course REED 350	Creative Summaries in the Disciplines!	Students in REED 350 have created Content Area Resource Anthologies, which feature creative, electronic resources for teaching in the disciplines. The integrated teaching ideas are creative and innovative and often involve multiple representations of thinking. For example, the students have created a variety of form poems as an alternative way to summarize in their content areas.	Maureen McLaughlin	117	1:45

SPEECH-LANGUAGE PATHOLOGY

Presenter(s)	Title	Abstract	Adviser	Location	Time
Tammy Boyd, Jaclyn Kavanagh, & Members of the Spring 2015 Speech Science Class	Lower Fo in Modern Women: Contradictory Evidence	It is often mentioned that the average Fo of young adult women has decreased over time. "They" state it as a fact. The Spring 2015 Speech Science class looked at the data from past studies and conducted their own study to see if this was true. Why should Fo be lower today than it was in the past? The same issues that may cause early puberty have been suggested as a cause. The results of studies from 1945 to the present were reviewed. There was no dramatic, nor even a slight decrease over time.	Elaine Shuey	145	2:45

SPORT MANAGEMENT

Presenter(s)	Title	Abstract	Adviser	Location	Time
Lumoi Muttu	How Technology has changed College Football Recruiting	My research will look to discover how technology has changed how recruiting is done in college football. I will seek to understand which avenues of technology are most used, most beneficial, and if it has made recruiting easier or harder. I will interview each participant asking them the series of questions below. My expected outcome is that technology has been beneficial recruiting in a major way and that social media is one of the primary additions. I believe this research will be significant to understanding how coaches and high school athletes interact during the recruiting process.	Min Jung Kim	145	3:00

SPORT MANAGEMENT (CONTINUED)

Presenter(s)	Title	Abstract	Adviser	Location	Time
Marla Simmons	Risk Factors Associated With Burnout in Division II Athletes	With the rise in burnout in sport cases, there is more of a need to discuss what is causing burnout and what can be done to alleviate the causes and symptoms. My research will determine the risk factors associated with burnout in Division II athletes. After the research is explained and consent forms are received each team will fill out surveys and questionnaires at their time appointment. From the data collected, I expect a negative causal relationship between the quality of coach-athlete relationships and burnout, while there would be a positive causal relationship between the overtraining with experiencing burnout.	Min Jung Kim	117	2:00
Karoline Vavra	The Effects of Sports Participation on the Self-Esteem of Adolescents	The purpose of the current study is to examine the effects of adolescents' self-esteem levels on their well-being through physical activity. Adolescence is a time when adolescents go through immense transition within the cognitive, physical, and social domain. Physically active adolescents can also improve their body esteem and physical competence and their physical, mental, and social well-being can be improved. There is no study to examine the relationship between sport participants' self-esteem and their physical, mental, and social well-being. I hypothesize that the self-esteem of adolescents who participate in sports will yield higher levels of physical, mental, and social well-being.	Min Jung Kim	117	2:15
Elias Krol	Making The Jump: The Benefits and Disadvantages of an Institution Moving to the FBS	This research examines the benefits and disadvantages of NCAA Division I football teams making transitions to the Football Bowl Subdivision. There are many different aspects of the transition that can effect an institution, which is what is being examined in this study. Three different schools were chosen for this study to understand the positive and negative effects they have experienced through this transition. There are numerous rules and regulations each institution must follow to perform a successful transition. There were many sport journals and sport almanacs used to help find the information needed to support and answer the research question.	Min Jung Kim	145	3:15

PERFORMANCES

Presenter(s)	Title	Abstract	Adviser	Location	Time
Levi Atkinson, Alexander Ortiz, Alicia Koval, Brenna Klinger, Carolyn Scarponi, Chris Haddad, Dayoung Kim, Desirae Bellas, Jessica Kurtz, Jessica Witman, Jillian Gorman, John (Kyle) Kinyon, Joseph Fitzgerald, Kayla Bolger, Kimberly Slezak, Licelot Thomas, Liz Thomas, Loretta Thomas, Luvlauha Calim, Mackenzie Tasetano, Pitman Swen & Sabrina Steed	"When you refuse to reuse it's our Earth you abuse"	Students from the Art + Design department's sculpture class taught by Prof. Farris-LaBar, will be designing sculptures composed of plastic containers. The sculptures will represent living forms that besides humans, thrive on planet earth. The display will raise awareness about the on-going misuse of plastic deposable bottles and containers on the planet. The sculptures will be placed near recycling bins throughout campus on the day of the event.	Darlene Farris-LaBar		

PERFORMANCES (CONTINUED)

Presenter(s)	Title	Abstract	Adviser	Location	Time
Evelyn Barone	Bendables: Bending Wood Through Laser Cutting	Wood is an amazing material that can take many forms and perform many tasks. Through the use of laser cutting I have created pieces made from normal plywood wood that can easily bend and twist, giving a new perspective on what you can do with wood.	Kolb-Dewitt	Sci Tech Lobby	3:40 - 4:00

SIGMA XI POSTER PRESENTATIONS

BIOLOGICAL SCIENCES

Presenter(s)	Title	Abstract	Adviser	Location
Kristy Harris	Screening for genetically modified organisms in USDA certified organic seeds	Biotech companies do not have to disclose to the public if their plants are genetically modified (GMO). This has resulted in an increase in the popularity of organically certified plants, and foods made from these plants. Most products labeled as organic do not allow the presence of GMO DNA as part of their criteria. The main organic certification agency in the United States is the USDA which follows the non-GMO guideline. Unfortunately, there are documented cases in which GMO DNA has spread uncontrollably into non-target plants. The aim of this project is to screen for possible GMO contamination in USDA certified organic vegetable seeds. Biotech companies produce GMO's using standardized gene cassettes constructed from plant viral DNA. Primers designed to amplify portions of this gene cassette in a PCR assay are used to determine the GMO status of the seed. The data from this project will provide some indication of the extent of the spread of GMO DNA into non-target organic crops.	Kitchens-Kintz	
Lauren Sarnese	Using morphology, geography, and seasonality to help distinguish three "entities" in the treehopper genus <i>Telamona</i> (Insecta: Hemiptera: Membracidae: Telamonini).	Using morphology, geography, and seasonality to help distinguish three "entities" in the treehopper genus <i>Telamona</i> (Insecta: Hemiptera: Membracidae: Telamonini). Treehoppers, sap-sucking insects in the family Membracidae, are often characterized by their strangely shaped pronotal (first section of the thorax) features. This examination compared the morphology, distribution, and seasonality of three entities in the genus <i>Telamona</i> that have been labeled "taxonomically uncertain" in order to improve clarity. The results show that all three entities could be separate species.	Matthew Wallace	144
Sofiaiqbal Mirza	Assessment of Sexual Dimorphism in Migratory Bats	Many mammals exhibit sexual size dimorphism where one sex is significantly larger than the other. Some bat species exhibit dimorphism with females being larger than males. We assessed sexual size dimorphism in 3 species of migratory bats: the Eastern Red Bat, Hoary Bat, and Silver-haired Bat. We used digital calipers to measure limb bones and then used t-tests to compare bone lengths of males and females of each species. Preliminary results indicate female-biased sexual dimorphism in our samples.	Whidden	

BIOLOGICAL SCIENCES (CONTINUED)

Presenter(s)	Title	Abstract	Adviser	Location
Michael Laforgia, Larry Laubach, Elizabeth McGovern & Howard P. Whidden	Continued Monitoring of Bat Populations in the Delaware Water Gap National Recreation Area	Since the emergence of white-nose syndrome (WNS) in February 2006, populations of hibernating bats have experienced severe declines throughout eastern North America. Our previous research on the impacts of WNS on the distribution and community composition of bats in the Delaware Water Gap National Recreation Area (DEWA) documented drastic declines in <i>Myotis lucifugus</i> (Little Brown Myotis) and <i>M. septentrionalis</i> (Northern Long-eared Myotis) after WNS, whereas <i>Eptesicus fuscus</i> (Big Brown Bats) and <i>Lasiurus borealis</i> (Eastern Red Bats) increased over this time period. In 2015, we continued emergence counts at 3 active summer maternity roosts to assess current population status and reproductive rates of Little Brown Myotis and Big Brown Bats. We also used an AR125 acoustic detector to record bat echolocation calls during mobile acoustic monitoring along 3 new transect routes in the DEWA. We identified echolocation calls to species using the SonoBat 3 autotransmitter and then plotted the locations of bats in the park using TransectPro. Our emergence counts suggest that populations at maternity roosts have stabilized and there is evidence of continuing reproduction. Along the new transect routes, the majority of recorded bat passes continued to be Big Brown Bats and Eastern Red Bats, and these species appear common and widespread in the DEWA. In contrast, Little Brown Myotis and <i>Perimyotis subflavus</i> (Tricolored Bats) were rarely detected and appear to have very restricted distributions in the park.	Whidden	

CHEMISTRY

Presenter(s)	Title	Abstract	Adviser	Location
Meghan Rabon & Ayatt Damra	Determination of thermodynamic parameters for the hydrolysis of PNPP using the van't Hoff equation	<p>The catalysis of p-nitrophenylphosphate (PNPP) by the enzyme acid phosphatase is used frequently for undergraduate enzyme kinetic laboratories. When hydrolyzed, PNPP produces the yellow product p-nitrophenol (PNP), which has a high extinction coefficient at 405 nm. Small quantities of PNP can be measured and quantified using UV spectroscopy with Beer's Law. The focus of this work is to develop a protocol suitable for the undergraduate laboratory to determine the thermodynamic functions for this reaction using the van't Hoff equation. This allows for the comparison of PNPP hydrolysis both thermodynamically and kinetically.</p> <p>The hydrolysis of PNPP takes place over time in water; in this experiment, we explored the use of HCl to decrease the time needed for this reaction to reach equilibrium. Optimal conditions for the hydrolysis of PNPP were explored by changing the concentrations of substrate and acid catalyst. Reaction tubes containing 50 μL 0.1M PNPP and 2 mL 0.2M HCl were incubated for 40 minutes at various temperatures. The reactions were terminated by the addition of NaOH. The absorbance of each solution was read and recorded. Using the van't Hoff equation, the enthalpy and entropy of the reaction were calculated with values in agreement with the literature.</p> <p>Traditional experiments used to measure enthalpy use bomb calorimetry which is expensive and technically difficult. Entropy is difficult to measure directly, and is generally calculated. The primary purpose of this experiment was to develop parameters to investigate the thermodynamics of the hydrolysis reaction of PNPP, and to illustrate the use of the van't Hoff equation. This experiment has several advantages to traditional experiments; it may be performed in a three-hour lab period, with easily controlled environmental factors. In addition, the substrate is inexpensive, and the necessary equipment is present in undergraduate biochemistry laboratories.</p>	Michelle Jones-Wilson	

PSYCHOLOGY

Presenter(s)	Title	Abstract	Adviser	Location
Julia Nikolajuk, Erin Rubendall & Tasha Wehrenberg	A Comparison of Financial Literacy in First Year Experience Students and Upperclassmen	The purpose of this study was to find out how much college students knew about finances, then compare their knowledge and behaviors by grade level. Past research has shown that college freshmen are quick to end up in financially unstable situations. This can be due to finding new freedom when starting college, spending too much money, or opening credit cards that they cannot afford. This study assessed the difference in knowledge between college freshmen and college upperclassmen (juniors and seniors), credit card behaviors, and shopping habits. A survey was administered to 260 freshman students enrolled in a First Year Experience course, as well as 71 upperclassmen enrolled in higher level Business Management classes at East Stroudsburg University. The survey included questions from the Survey of Personal Financial Literacy, The Personal Finance Questionnaire, Personal Financial Knowledge Questionnaire, Credit Card Usage and Shopping Behavior Scale, Internet Buying Scale, and the Money Attitude Scale. Freshmen participants also attended a symposium, which taught them about loans, interest rates, and credit card usage. Following the symposium, two research assistants held workshops to help freshmen develop money management skills through the budgeting board game, "Budget Mania." Female college freshmen were found to have more shopping behaviors when compared to male college freshmen. This caused the female gender to have a higher amount charged to their credit card monthly, and a higher amount still owed after their monthly credit card payment. Moreover, college freshmen scored higher on a financial quiz than upperclassmen, showing that they knew more about finances, while both grade levels reported to owning about the same amount of credit cards. The use and application of these results are discussed further.	Irina Khusid	

SIGMA XI ORAL PRESENTATIONS

BIOLOGICAL SCIENCES

Presenter(s)	Title	Abstract	Adviser	Location	Time
Eric Januszkiewicz	Optimization of a Multiplex PCR Analysis for <i>Crotalus horridus</i>	Timber Rattlesnakes (<i>Crotalis horridus</i>) have experienced habitat loss, population fragmentation, and extirpation throughout their range in the Northeastern United States. Information regarding the genetic variation of this species can be used for conservation management efforts. A multiplex of nine primers was designed for genotyping populations of <i>C. horridus</i> to evaluate genetic variation. DNA was used from shed skins, tissue samples, and scale clippings. From the samples, 87.04% of the loci were amplified with a mean of 4.444 alleles per locus. The mean polymorphic information content was 0.5636, indicating this multiplex can be used for future analysis of <i>C. horridus</i> populations.	Thomas LaDuke	144	2:00

BIOLOGICAL SCIENCES (CONTINUED)

Presenter(s)	Title	Abstract	Adviser	Location	Time
Andrew Bischer	Effects of Artificial Sweeteners and Probiotics on the Gut Microbiome and Immune System	<p>The gut microbiome plays a large and important role in metabolism, nutrient absorption, and the immune system. Any negative impacts on the normal flora can have serious implications in regards to health. This includes obesity and some autoimmune disorders, both of which are major issues facing our society (Walsh et al., 2014). While artificial sweeteners have been marketed as healthy, calorie free, alternatives to sugar, new research is showing that they can be damaging to the normal flora. It has been found that their consumption can lead to glucose intolerance due to changes in the microbiome (Suez et al., 2014).</p> <p>Changes in the microbiome have been found to alter how the immune system responds, such as an increase in interleukin-6 when there is an overgrowth of bacteria in the small intestine (Riodan et al., 1996). The replacing of normal, healthy bacteria in the gut with pathogenic bacteria is also shown to increase the amount of tumor necrosis alpha released by the immune system (Haller et al., 2000).</p> <p>In our research, we will be studying the effect that artificial sweeteners and probiotics have on the microbiome of mice. We will compare the microbiome of mice that were not exposed to artificial sweeteners or probiotics to the microbiome of mice that were exposed to either probiotics or artificial sweeteners. We will also use cytokine assays and anti IgA antibodies to determine how they affect the strength of the immune system, specifically the gut immune system.</p>	Abdalla Aldras	144	4:00
Kacie Chern, Meaghan Bird & Kaitlyn Frey	Ticks and Tick-Borne Pathogens of Black Bears (<i>Ursus Americanus</i>) in New Jersey	<p>Ticks and blood were collected from black bears (<i>Ursus americanus</i>) in northwestern New Jersey and were tested for various tick-borne pathogens. Two species, <i>Dermacentor variabilis</i> and <i>Ixodes scapularis</i> were collected. <i>Dermacentor variabilis</i> was the most frequently collected tick. A subset of <i>D. variabilis</i> (256) from 19 bears was screened for <i>Francisella tularensis</i> and <i>Rickettsia</i> spp. by polymerase chain reaction (PCR). <i>Rickettsia</i> spp. was detected in 6 of 69 dog tick pools (8.6%). All <i>D. variabilis</i> were negative for <i>F. tularensis</i>. Twenty-nine <i>I. scapularis</i> (23 adults and 6 nymphs) were collected from 11 bears. Fourteen pools of <i>I. scapularis</i> from the bears were screened for <i>Borrelia burgdorferi</i>, <i>Babesia</i> spp., <i>Anaplasma phagocytophilum</i> and <i>Bartonella</i> spp. by PCR. <i>Borrelia burgdorferi</i> was detected in 3 of 14 pools of <i>I. scapularis</i> (21.4%), <i>Babesia</i> spp. in 2 of 14 (14.2%), <i>A. phagocytophilum</i> in 1 of 14 (7.1%), and <i>Bartonella</i> spp. in 2 of 14 (14.2%). Fourteen bear blood samples were tested for <i>F. tularensis</i>, <i>Rickettsia</i> spp., <i>B. burgdorferi</i>, <i>Babesia</i> spp., <i>A. phagocytophilum</i>, and <i>Bartonella</i> spp. by PCR. One of 14 bear blood samples was positive for <i>Babesia</i> spp. (7.1%). None of the 14 bear blood samples were positive for <i>F. tularensis</i>, <i>Rickettsia</i> spp., <i>B. burgdorferi</i>, <i>A. phagocytophilum</i>, or <i>Bartonella</i> spp. While this study and others have found tick-borne pathogens to be associated with black bears, their role as a potential host of these pathogens remains unclear.</p>	Abdalla Aldras	144	4:20

BIOTECHNOLOGY

Presenter(s)	Title	Abstract	Adviser	Location	Time
Eric Lollis, & Danielle Prestifillippo	In Vitro Study of the Effects of Vitamin B12 on Propionibacterium acnes and its Production of Porphyrin Leading to Acne	In vitro study of the effects of Vitamin B-12 on Propionibacterium acnes and its Production of Porphyrin- Propionibacterium acnes is an anaerobic, gram positive bacilli that is a normal flora of the skin. One of the types of organic chemicals secreted by this bacteria is porphyrins, which can act as inflammatory compounds. When this bacteria becomes trapped in the pilosebaceous follicles of the skin, these porphyrins become more concentrated and cause an inflammatory response, and ultimately lead to acne. In this project, the effects of vitamin B12 in vitro porphyrin production by Propionibacterium acnes are being studied. Various concentrations of vitamin B12 have been infused into the agar and the bacteria are currently being grown. An extraction procedure will be used to extract and isolate the porphyrins, and a UV spectroscopy analysis will be used to quantify the amount of porphyrins being produced. The effects of herbal remedies will be studied in the near future.	Abdalla Aldras	144	2:40

COMPUTER SCIENCE

Presenter(s)	Title	Abstract	Adviser	Location	Time
Shawn P. Adamski	Designing An Interest-Metric-Based Recommender System	Recommender Systems have become a valuable tool for helping online users find what they need. However, today's research on those systems focus on variations of two common types of recommender systems. In this paper we propose an alternative to these two methods. Taking advantage of what is known as an Interest Metric we design a recommender system that will generate recommendations using sparse data about the users. We will explain how the system works, how it was tested and the advantages it has over other recommender systems.	Robert Marmelstein	144	3:00
Paul Mirams	Large Scale Testing Utilizing Commodity Based Cloud Computing Resources	The increasing use of mobile, hand held devices makes it difficult to adequately test large scale client server applications in a cost effective manner. One positive development in this area is the availability of cheap cloud-based computing resources. However, without a framework or test harness this is still difficult to use optimally. My research investigates the implementation of a large scale, automated test harness to exercise a client-server application. This test harness, which has been written to work with Amazon Web Services, will be demonstrated in the test of a client-server application for the Blackjack card game.	Robert Marmelstein	144	3:20

MATHEMATICS

Presenter(s)	Title	Abstract	Adviser	Location	Time
Andrew J Rispin	Sabermetrics- An Objective Look at Baseball	Sabermetrics is the mathematical and statistical analysis of baseball. In other words, an objective look at America's pastime. Today, with players earning more money than ever before, there must be a way to evaluate each player in order to justify why 42 year old Bartolo Colon (RHP) made \$11 million while 28 year old John Niese (LHP) made only \$7 million in 2015. Since the turn of the century, more Major League teams have been developing data analysis departments to evaluate which players to start, draft, bench, trade, or release. So, how do they determine who to play and pay?	Olivia Carducci	144	3:40

SPECIAL EXHIBITS

	Presenter(s)	Title	Abstract	Adviser	Location	Time
Theatre	Destiny Washington, Ayuana Rosario, Jannel Armstrong, Taylor V. Torres, Angelica Ramirez, Cherval Royster & Victoria O. Silva	For Colored Girls Who Have Considered Suicide / When the Rainbow Is Enuf A Choreopoem By Ntozake Shange	Several of ESU's Theatre Students will be playing select scenes from their upcoming performance: "For Colored Girls Who Have Considered Suicide / When the Rainbow Is Enuf." The play itself discusses the systemic injustice facing African American women as well as the interconnected nature of loss, struggle, love, and empowerment through sisterhood. The students taking part in these performances are themselves competing in several theatrical competitions, including the Kennedy Center American College Theatre Festival, the Irene Ryan Scholarship Competition, and the Music Theatre Initiative.	Susan O'Hearn, Yoshi Tanokura	Sci Tech Lobby	4:00
Center for Research and Economic Development	Mendim Bardhi, Nicole Kern, Cameron Maher, Sarah Shiner & Blaise Delfino	ESU Student Entrepreneurs	Many ESU students have started their own business ventures. In this presentation, we share our experiences in entrepreneurship, where we develop creative solutions for organizations external to ESU. Presenters will describe their work with: New Mind Design, ESU Institute for Public Health Research & Innovation, TickChek, and Fader Plugs.	Mary Devito, Steve Godin, Darlene Farris-LaBar, David Mazure (with Paul Schembari as Moderator)	Sci Tech Lobby	4:40 - 5:40
Education	David Sullivan, Caitlin Sullivan, Greg Witt & Scott Good	Student Teacher Forum	Practicing secondary content student teachers visited PSED 421/521, Seminar in Secondary Education II: Teaching Secondary Students in Diverse, Inclusive Classrooms, on March 17, 2016. This is a seminal workshop in the Sem II curriculum. Seminar II students prepared questions for student teachers. The student teachers rotated about the room to visit with each small team of Sem II students. They asked/ responded to all concerns about student teaching. Following the Student Teacher Forum, each Seminar II student will write (is writing) a reflective article on his/her experience. We produce a journal featuring student articles and photos		Sci Tech Lobby	5:45 - 6:30



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