Session 1 - Posters (8:30-9:30)

01  73 The Effects of Environmental Cross-Over on Inflammation-Induced Nociception
    Jillian Armentrout
    Faculty Sponsor(s): Jill M. Tall Biology

02  107 TRANSCRIPTIOAL ANALYSIS OF A POSSIBLE STRESS PROTEIN NCU-08832 IN
    NEUROSPORA CRASSA
    Jared Senvisky
    Faculty Sponsor(s): David K. Asch Biology

03  262 Observations of Human Impact on Costa Rica’s Environment
    Kayla Coldsnow, Heather Miller
    Faculty Sponsor(s): Carl G. Johnston Biology

04  268 Los Observaciones sobre Los Efectos de los Humanos al Ambiente de Costa Rica
    Heather Miller, Kayla Coldsnow
    Faculty Sponsor(s): Carl G. Johnston Spanish

05  269 Natural and Anthropogenic Disturbance on Costa Rican Coral Reef Ecosystems: An
    Observational Study.
    Daniel Lisko, Justin Waldern, EmmaLeigh Given
    Faculty Sponsor(s): Carl G. Johnston Biology

06  276 Loitering in the Lab: An Analysis of Habituation Sessions on Behavioral
    Outcomes
    Michele Awad, Smriti Gupta
    Faculty Sponsor(s): Jill M. Tall Biology

07  371 The Human Oral Microbial Communities of Six Healthy Adults, and the
    Abundance of Resistance Genes.
    Jonathan Guy, Zachary Marinelli
    Faculty Sponsor(s): Carl G. Johnston Biology

08  280 MALDI peptide fragment identification of oxidized bovine serum albumin
    David Yash, Joseph Crum
    Faculty Sponsor(s): Johanna Krontiris-Litowitz Biology Pre Medical

09  299 The Effects of Dietary Probiotic Yogurt on the Presence of LPS Producing
    Bacteria in the Gastrointestinal Tract
    Justin Waldern
    Faculty Sponsor(s): Carl G. Johnston Biology Pre Medical

10  104 A Safe Preparation of Azides and their Applications in Organic Synthesis
    Methodology
    Jennifer Moore, Christopher Copeland
    Faculty Sponsor(s): Peter Norris & Matthias Zeller Chemistry

11  140 The use of arylsulfonyl azides as precursors to organic derivatives
    Kwaku Kyei-Baffour, Mike Delost
    Faculty Sponsor(s): Peter Norris Chemistry

12  206 Computational Analysis of Gas-Phase Fragmentation
    Jennifer Williamson
Faculty Sponsor(s): Brian D. Leskiw  
Chemistry

13  211 Characterization of Substrate Specificity of β-Glucosidase BglX from E. coli  
Joshua Weimer, Benjamin Clement, Kole Gasior, Aubrey Hale, Melanie Welsh  
Faculty Sponsor(s): Nina V. Stourman  
Chemistry

14  221 Aryl Azides in the Conversion of Alcohols into Carbamates  
Cephas Afeke, Caleb J Tatebe  
Faculty Sponsor(s): Peter Norris  
Chemistry

15  260 Hydride Generation Laser Induced Fluorescence Study of Bismuth  
Eric Kennehan, Michael Macinga  
Faculty Sponsor(s): Josef B. Simeonsson  
Chemistry

16  305 Talking to Molecules with Magnets  
Patrick Cook  
Faculty Sponsor(s): Peter Norris  
Chemistry

17  345 Development and Characterization of GC MS and GCxGC MS Techniques for Analysis of Major and Minor Hydrocarbons in Fuel Samples  
Stephanie Horvath  
Faculty Sponsor(s): Josef B. Simeonsson  
Chemistry

18  360 Examining the Fragmentation of Copper and Nickel Beta-diketonate Complexes Using Computational Methods  
Kyle Kemats  
Faculty Sponsor(s): Brian D. Leskiw & Howard D. Mettee  
Chemistry

19  209 Interaction of Metal Catalysts with Different Morphological CeO2 Supports for CO Oxidation  
Samantha Mock, Megan Rochow  
Faculty Sponsor(s): Ruigang Wang  
Chemistry Pre Medical

20  331 Manufacture of Influenza Vaccine Using Sf9 Ovarian Cell Line  
Estee George  
Faculty Sponsor(s): Douglas M. Price  
Chemical Engineering

Session 2 - Oral Presentations (8:30-10)

Business

01  294 Cybercrime: Computer and Internet Fraud  
Kocak Ozcan  
Faculty Sponsor(s): Karin A. Petruska  
Business Administration

02  245 Gift Giving: an Economic Perspective  
Corinne Bocci, William Cochran  
Faculty Sponsor(s): Tod S. Porter  
Business Economics

03  293 Fraud in Nonprofit Organizations  
Genna Notareschi  
Faculty Sponsor(s): Karin A. Petruska  
General Business

04  344 The Sarbanes-Oxley Act of 2002: Was it a Success?  
Mason Fowler
Job Satisfaction and Organizational Commitment-C's Waffles
Michael W. Mace, Alexander Chang, Nicholas Mikula, Cara Ricottilli, Michael Valiski
Faculty Sponsor(s): Guohong Han
Business Administration

Environmental Issues
James Gallery

01 30 Environmental Evaluation of Submerged Debris on the Reefs of San Salvador Island, The Bahamas
Jessie Keeler, Elizabeth Johnson
Faculty Sponsor(s): Ronald V. Shaklee
Engineering Chemical

02 169 Coffelt Hall Rain Garden
Andre A. Silvers, Pat Circelli
Faculty Sponsor(s): Robert J. Korenic & Joe Sanson
Civil and Construct Eng Tech B

03 352 A Preliminary Hydrogeochemical Evaluation of the Mahoning River Watershed to Assess Potential Water Quality Impacts From Unconventional Natural Gas
Derek Scott, Sean Giblin
Faculty Sponsor(s): Colleen E. McLean
Environmental Studies

04 287 Youngstown State Univeristy Herbarium and Modern Uses
Heidi Hall, Cory B. Powell, Timothy D. Shives, Nicholas P. Karaousis, Brandon T. Sinn
Faculty Sponsor(s): Ian J. Renne
Environmental Studies

05 149 Water Quality and Macroinvertebrate Assessment of a Channelized Stream: Snyder Ditch in Orwell, Ohio on the Western Reserve Land Conservancy
Emily Ankney
Faculty Sponsor(s): Felicia P. Armstrong
Environmental Studies

06 407 Predicting Eastern Bluebird reproductive success using local and landscape variables: a GIS approach
Amanda L. Ruozzo
Faculty Sponsor(s): Ian J. Renne
Biology

Gender & Sexuality
Coffelt

01 139 An Analysis of How Individuals Make Judgments of a Person’s Sexual Orientation Based on Physical Appearance.
Christina Marie Yovick
Faculty Sponsor(s): Rosemary D'Apolito
Sociology

02 131 Same-Sex Marriage and the Rule of Law
Melissa Wasser
Faculty Sponsor(s): Alan E. Tomhave
Philosophy

03 363 Female Imagery in the Upper Paleolithic
Faofua Togisala
Faculty Sponsor(s): Loren R. Lease
Anthropology

04 236 Elements of Communication that Obstruct Consequences for Sexual Harassment in the Workplace
Karli Rupert
Faculty Sponsor(s):  Rebecca M. Curnalia
Comm St Interpersnl Org Track
05  147 Cognitive Dissonance Theory: Homosexuality and Religiosity
Sarah Mercer, Rachel Coggins, Deonte Tarver
Faculty Sponsor(s):  Cary L. Wecht
Comm St Media Track
06  326 Perception of women in a male-dominated field.
Rebekah Tedde
Faculty Sponsor(s):  Rebecca M. Curnalia
Comm St Media Communicatn Trck

Health & Human Services

01  165 Adding Fuel to the Fire: The Absorption of Medical Oxygen in the Home
Melissa James
Faculty Sponsor(s):  Susan A. Clutter
Forensic Sci Chemistry Track
02  274 Are We Sheep? An Examination of Victims Fighting and Fleeing in Mass Shootings.
James J. Scollione
Faculty Sponsor(s):  Gordon G. Frissora
Criminal Justice
03  151 Locational Disparities of Mental Health Courts
Elizabeth Hornberger
Faculty Sponsor(s):  Richard L. Rogers
Criminal Justice
04  389 Sexual Health Education
Monique Malmer
Faculty Sponsor(s):  Louise A. Aurilio
Nursing BSN G
05  263 Occupational Therapists' Burnout
Mark Mellott
Faculty Sponsor(s):  Mary L. Yacovone
Public Health
06  252 Design Challenges in Smart Clothing
Samantha Nelson
Faculty Sponsor(s):  Tacibaht Turel
Merch Fashion and Interior

Psychology

01  94 Working Memory Load and Cognitive Test Anxiety in Elementary School Students
Gregory A. Satmare
Faculty Sponsor(s):  Molly Jameson Cox
Psychology
02  251 Individual Differences in Resiliency and Childhood Environment in the Context of Counter-Preference Problem-Solving
Lisa Ridgley
Faculty Sponsor(s):  Julie B. Boron
Psychology
03  247 A Qualitative Analysis of Changes in Social Relationships across the Lifespan
Gina Mancini, William Erskine, Christina Slavens, Krystle Van Dyke, Elizabeth Winston
Faculty Sponsor(s):  Molly Jameson Cox
Communication Studies
A Comparison of an iPad Application and Teacher Presented Material to Teach Children With Autism Identification of Common Nouns
Amanda Gillen
Faculty Sponsor(s): Stephen R. Flora
Psychology

Perceptions of the Undergraduate: A Qualitative Study on Aural Skills
Meredith Anderson
Faculty Sponsor(s): Joseph P. Louth
Music Theory

Session 3 - Posters (9:40-10:40)

Engineering / COFSP Ohio

01 240 Raspberry Pi Cluster Website Server
Michael Weaver, Ashley Wagner
Faculty Sponsor(s): Kriss A. Schueller
Information Technology B

02 56 Design and Traffic Analysis of a Rural Shopping Center Parking Lot
Kevin Ball
Faculty Sponsor(s): Shakir Husain
Civil Engineering

03 14 Developing customization and complexity scales for additive manufacturing products
Ashley N. Martof, Lauren M. Rodomsky, Caitlyn M Rodomsky, Dakesha C. Jordan, James W. Limperos
Faculty Sponsor(s): Brett P. Conner
Industrial and Systems Engr

04 74 Permeability of Oxygen Through a Semi-porous Membrane
Eric Schubert, Antonio DiSalvo, Kyle Bryan
Faculty Sponsor(s): Douglas M. Price
Civil Engineering

05 278 Studded Wall Leveling Mechanism
Matthew Lehman, Rick Smith, Joe Prosaic
Faculty Sponsor(s): Hazel Marie
Mechanical Engineering

06 9 YSU Lincoln Parking Deck: Analysis of traffic flow patterns
Jennifer McAnallen, Kevin London, Jason Huey, Nico Minniti, Anthony Hill, Blake Walker
Faculty Sponsor(s): John H. George
Mechanical Engineering

07 228 YSU SAE Baja Car: Design and Fabrication of Body Elements
James Schuster, Eduardo Bustillos, Christopher DeChellis, Benjamin Tadla
Faculty Sponsor(s): Hazel Marie
Mechanical Engineering

08 58 Arduino Controlled Laser Etcher
Patrick Hyden, Kyle Spickler, Brennen Morrison, Nick Buffa, Patrick Bollinger, Matthew Pilch
Faculty Sponsor(s): Salvatore R. Pansino
Mechanical Engineering

09 127 Low Velocity Impact of Fiber-Metal Laminate Structures
Zach Abraham, Dalton Westhead, Dominic Sikora, Steven Schiffhauer, Casshan Wallace
Faculty Sponsor(s): Pedro Cortes
Mechanical Engineering

10 78 Process and Plant Design for the Manufacturing of the Influenza Vaccine Using
CHO and Insect Cells
Sean Gabriel, Samantha Tharp, Nicholas Ragan
Faculty Sponsor(s): Douglas M. Price
Chemical Engineering

11 366 Eddy Current Brake
Joseph Cassata, Kyle Skiba, Rick Chambers
Faculty Sponsor(s): Jalal Jalali
Elect Engr Comp Digital Opt

12 34 Work Measurement, Analysis and Redesign for an Industrial Process at a Ceramics Hydroforming Facility
Stephen Senediak, Bryan Ray
Faculty Sponsor(s): Martin Cala
Industrial and Systems Engr

13 33 Improvement of Work Design at Altronic, LLC
Jessie Tuscano, Ahmad Al-Ahmad
Faculty Sponsor(s): Martin Cala
Industrial and Systems Engr

14 153 Characterizing High-Strain Rate Behavior of Stainless Steel Fabricated by Additive Manufacturing
Ashley Bowers
Faculty Sponsor(s): Brett P. Conner
Industrial and Systems Engr

15 36 Analysis of Manufacturing Operations at Gasser Chair to Improve the Processes and Establish Time Standards
Samuel Finocchio, Nick Vitucci, Chelsea Malone
Faculty Sponsor(s): Martin Cala
Industrial and Systems Engr

16 40 Six Sigma Analysis (DMAIC) of a Metrology Process at M-7 Technologies TaiJaune Robinson, Dakesha Jordan
Faculty Sponsor(s): Martin Cala
Industrial and Systems Engr

17 84 Work Measurement and Proposal of Improvements of Gearbox Refurbishment at M7 Technologies
Leo Daprile, Joshua Wakeford
Faculty Sponsor(s): Martin Cala
Industrial and Systems Engr

18 86 Work Analysis of Ceramic Fiber Sanding Process at Fireline Inc
Mary Cherrington, James Limperos, Patrick Kiraly
Faculty Sponsor(s): Martin Cala
Industrial and Systems Engr

19 125 Time and Labor Efficiency Study at Northern States Metal
Keyvan Mehri, Chris Elkins, Mason Giacomelli
Faculty Sponsor(s): Martin Cala
Industrial and Systems Engr

20 32 Methods Engineering Analysis and Work Design at Brainard Rivet to Improve Parts Handling and Packaging
Joseph Waltemire, Ashley Bowers
Faculty Sponsor(s): Martin Cala
Industrial and Systems Engr

Session 4 - Oral Presentations (10:30-noon)

Dissent Humphrey

01 365 An Analysis of the United Arab Emirates' Foreign Policy Dealing with Rights of Undocumented Migrants and Famine
<table>
<thead>
<tr>
<th>Project Number</th>
<th>Title</th>
<th>Authors/Participants</th>
<th>Faculty Sponsor(s)</th>
<th>Sponsor Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>Lower Dissent and Facilitate Unity in Religious Organizations: Introducing a Willingness Theory</td>
<td>G. G. Basham</td>
<td>Rebecca M. Curnalia</td>
<td>Political Science</td>
</tr>
<tr>
<td>03</td>
<td>The Evolution of Dissent: Student Protest Before and After the Occupation of Columbia University, April 1968.</td>
<td>Heidi Summerlin, David Simonelli</td>
<td>Martha I. Pallante</td>
<td>History</td>
</tr>
<tr>
<td>04</td>
<td>RELICS OF SLAVERY: AN INVESTIGATION, REVIEW AND COMPARISON OF POST-REVOLUTIONARY WAR VERNACULAR SLAVE ARCHITECTURE IN AMERICA AND ON SAN SALVADOR ISLAND, BAHAMAS</td>
<td>Richard Schumacher</td>
<td>Ronald V. Shaklee</td>
<td>American Studies</td>
</tr>
<tr>
<td>05</td>
<td>The Booker Project</td>
<td>John Veauthier, Sara Rodino, Karen Bell, Justin Passaro, Wanda Baker, Catilin Worley, John Veauthier</td>
<td>Alyssa J. Lenhoff</td>
<td>Journalism</td>
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**Mechanical Engineering I**

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<thead>
<tr>
<th>Project Number</th>
<th>Title</th>
<th>Authors/Participants</th>
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</thead>
<tbody>
<tr>
<td>01</td>
<td>Design of a Vertical Axis Wind Turbine</td>
<td>Marcus Nittoli, Raymond Gladych, Randy Caskey, Steve German</td>
<td>John C. Terzak</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>02</td>
<td>Design and Analysis of a Wind Turbine Transmission</td>
<td>Matt Harrold, Sam Herb, Rick Heusey, Mike Krizner</td>
<td>John C. Terzak</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>03</td>
<td>Design and Analysis of a Power Drill</td>
<td>Mike Bestic, Cody Gillespie, Adam Graff, Tim Shreeve</td>
<td>John C. Terzak</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>04</td>
<td>Mechanics of a Single Cable Elevator</td>
<td>Lucas Obrenski, Jon Muszik, Mike Livi, Karlie Ligore</td>
<td>John C. Terzak</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>05</td>
<td>Hard-Wood Lathe: Incorporation of Cog Belt &amp; Tapered Bearing</td>
<td>Kevin Socha, Eric Myers, Nathaniel Marchese, Stephen Zaborsky</td>
<td>John C. Terzak</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>06</td>
<td>Analysis of a 5 Ton Portable Gantry Crane</td>
<td>Dom Sikora, Michael Stanley, Jennifer Hamill, Sam Trimm, Michael Seifert</td>
<td>John C. Terzak</td>
<td>Mechanical Engineering</td>
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**Media & Internet**

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<td>01</td>
<td>The effect of media on social appearance anxiety and disordered eating.</td>
<td>Erin Crist</td>
<td>Cofell</td>
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<td>Project Number</td>
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<td>02</td>
<td>Posting Your Way into General Life Satisfaction: An Analysis on Facebook Usage and Personality Type</td>
<td>Tacibaht Turel, Karen Giorgetti</td>
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<td>03</td>
<td>Sharing a Journey: A Study of Musical Communication in the Video Game, Journey</td>
<td>Ewelina Boczkowska, Rebecca M. Curnalia</td>
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<td>04</td>
<td>Media Analysis of The CW</td>
<td>Rebecca M. Curnalia, Joseph P. Lyons</td>
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<td>05</td>
<td>The Different Dimensions of Disney</td>
<td>Diane Barnes, Richard L. Rogers</td>
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<td>06</td>
<td>Millennial Attitudes on Evolution</td>
<td>Richard L. Rogers, Susan A. Lisko</td>
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<td>01</td>
<td>Prehospital spine immobilization: a class III medical intervention</td>
<td>Joseph P. Lyons</td>
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<tr>
<td>02</td>
<td>Medical Providers and Technology: Who Implements Technology More and the Effect on the Doctor-Patient Relationship</td>
<td>Rosemary D'Apolito, Richard L. Rogers</td>
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<td>03</td>
<td>Assessing Dietetics Preceptor Usage of Nutrition Focused Physical Assessment (NFPA) Techniques in Evaluating Patients for Care in Long-term and Acute Care</td>
<td>Zara C. Rowlands, Susan A. Lisko</td>
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<td>04</td>
<td>The Nutrition Care Process Implementation and Use in Healthcare Settings by Registered Dietitians</td>
<td>Zara C. Rowlands, Susan A. Lisko</td>
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<td>05</td>
<td>The Completeness of the Emergency Medical Record with the Implementation of Speech Recognition Technology</td>
<td>Joseph P. Lyons, Richard L. Rogers</td>
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<td>06</td>
<td>Comparison of Multiple Daily Injections VS Continuous Subcutaneous Insulin Infusion in Treatment of Type 1 Diabetes Mellitus</td>
<td>Susan A. Lisko, Joseph P. Lyons</td>
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</tr>
</tbody>
</table>
Session 5 - Posters (10:50-11:50)

Environmental Studies / COFSP

01  357 Development of Plant Alternative Splicing Database
    Jonathan Braessler, John Meinken
    Faculty Sponsor(s): Xiangjia Min
    Computer Information Systems A

02  361 FunSecKB2: A Database for Predicting Subcellular Location of Fungal Proteins
    John Meinken
    Faculty Sponsor(s): Xiangjia Min
    Computer Information Systems A

03  100 Grain Size Study of Beach Sands from San Salvador, Bahamas
    Rachael Liposchak, Courtney McLaughlin, Brittany Stockmaster
    Faculty Sponsor(s): Christopher R. Mattheus
    Environmental Studies

04  284 Characterizing Storm Layers in Coastal Ponds of San Salvador, Bahamas
    Derrick Allen, Joe Townsend
    Faculty Sponsor(s): Christopher R. Mattheus
    Geology

05  109 Correlating between Pigeon Creek and Relict Tidal Systems on San Salvador Island, The Bahamas
    James Frost, Robert Clark
    Faculty Sponsor(s): Christopher R. Mattheus
    Environmental Studies

06  185 Lake Levels and Hard Structure Orientation Controls on Headland Beach Evolution Along Ohio’s Lake Erie Shore
    Joshua Fowler
    Faculty Sponsor(s): Christopher R. Mattheus
    Environmental Studies

07  253 Comparing Tropical Rainforests to Tropical Montane Cloud Forests in Costa Rica
    Shannon J. Doherty, Kaite A. Frederick, Erin J. Freed
    Faculty Sponsor(s): Carl G. Johnston
    Environmental Studies

08  341 Macroinvertebrate diversity as an indicator of freshwater stream quality:
    Determining biotic health of Connoquenessing Creek post-dam removal
    Leah Kaldy
    Faculty Sponsor(s): Felicia P. Armstrong
    Environmental Studies

09  385 The effects of a constructed wetland to mitigate cultural eutrophication in an agricultural environment
    Jessica Bowles, Johnna Zona
    Faculty Sponsor(s): Colleen E. McLean
    Environmental Studies

10  394 Examination of Possible "Salty Fingers" in Diffusion of Cobalt Nitrate
    Michael Baker, Connor Hetzel, Michael Kunzer, Ian Schantz
    Faculty Sponsor(s): Michael J. Crescimanno
    Physics

11  51 Regenerative Braking for Motor Vehicles and Freight Trains
    Dakota Joy, Justin Getz, Brandon Mirto, Sasha Monroe, Jenna Wise
    Faculty Sponsor(s): Richard G. Goldthwait
    Mechanical Engineering

12  65 Calculating the Energetics of pi-pi Interactions between Aromatics and Fluoroaromatics
    Kristen Jo Hernandez
Faculty Sponsor(s): Mattias Zeller, Allen D. Hunter, & John L. Payton
Chemistry
13 66 Nanoflowers
Jennifer R. Miller, Matthew J. LaLama, Brian J. Stahl, Darian E. Wilson, Paije M. Kiraly
Faculty Sponsor(s): Matthias Zeller & Allen D. Hunter
Chemistry
14 215 Activity of Lactase in Three Commercial Supplements
Allison Guerrieri, Rachel Centofanti, Samantha Mock
Faculty Sponsor(s): Nina V. Stourman
Chemistry Pre Pharmacy
15 19 Rating NFL Teams with "Point Spreads"
James Munyon, Drew Saluga, Michael Seifert, Timothy Shreeve
Faculty Sponsor(s): Thomas P. Wakefield
Math Statistics Track
16 69 Monitoring Indoor Air for Potentially Hazardous Particulates
Rae'ven Crum, Vincent Pilolli, Kaylin Camp, Amanda Seidler, Ralph Roth
Faculty Sponsor(s): Alan M. Jacobs
Environmental Science
17 71 Development of a PCR-Based Asssay to Detect Penicillium marneffei in Insects
Kristin LaTessa, Kayla Coldsnow, Jamie Lyn Doyle, Jason Gilmore, Sara Johnson, and Kristin Latessa
Faculty Sponsor(s): Chester R. Cooper
Biology
18 111 An Introduction to the Calculus of Timescales
Josiah Banks, Joseph Gantz, Austin Weinreber, Nicole Pavlansky
Faculty Sponsor(s): Padraic W. Taylor
Mathematics
19 205 Dynamic Equations on Time Scales
Kevin McLane
Faculty Sponsor(s): Padraic W. Taylor
Mathematics
20 270 An Analysis of Interest Rate Models
Nick Popovich
Faculty Sponsor(s): Thomas P. Wakefield
Math Actuarial Math Track

Session 6 - Posters (1:30-2:30)

CLASS / Education / Business  Ohio
01 337 Implications for Counseling: Exploring the Mental Health of Parents of Children with ASD
Rebecca K. Szanto
Faculty Sponsor(s): Jake J.Protivnak
Counseling
02 246 Factors Affecting Education Leadership Doctoral Program Attrition
Jason Mays
Faculty Sponsor(s): Charles B. Vergon
Educational Leadership
03 377 Exploring the Relationship Between Body Image and Self-Esteem in Male Athletes and Non-Athletes: A College-Aged Sample
Michael J. Leskosky, Dana Krieg
Faculty Sponsor(s): Jake J.Protivnak
Counseling
04 387 Treating the comorbid diagnosis of eating disorders and social anxiety: A group
therapy approach
Ally Zins
   Faculty Sponsor(s): Nicole L. Bradley
   Counseling

05  399 Three Views of Y.S.U.'s Supportive Campus Environment
Margaret Gratz-Reynolds
   Faculty Sponsor(s): Karen Becker
   Interdisciplinary - Comm

06  327 One Hot Cookie
Rebekah Tedde
   Faculty Sponsor(s): Rebecca M. Curnalia
   Comm St Media Track

07  375 FX - "Fearless"
   Lance Nave, Rebekah Tedde
   Faculty Sponsor(s): Rebecca M. Curnalia
   Comm St Media Track

08  108 Increasing prompted and unprompted vocalization in teenage girls with autism using a progressive reading procedure
   Katie DiCola
   Faculty Sponsor(s): Stephen R. Flora
   Applied Behavior Analysis

09  198 Eliminating the Corrosive Effects of One Student's Behavior with an Independent Group Contingency
   Samantha Evans
   Faculty Sponsor(s): Stephen R. Flora
   Applied Behavior Analysis

10  332 A Comparison of Match-to-Sample and Respondent-type Training of the Blocking Effect in Equivalence Classes
   Kristopher Brown
   Faculty Sponsor(s): Michael C. Clayton
   Applied Behavior Analysis

11  152 Dissociating Implicit and Explicit Learning Systems Over Development
   Michelle O'Connor
   Faculty Sponsor(s): Jeffrey T. Coldren
   Psychology

12  296 Overcoming Biases with Systematic Observation
   Elizabeth Hanna
   Faculty Sponsor(s): Michael L. Raulin
   Psychology

13  395 Competitive anxiety and the effect of relaxation methods
   Carolyn Jesko
   Faculty Sponsor(s): Melanie L. Shoup-Knox
   Psychology

14  115 Bringing the War Home: Redeployment Experiences of Spouses of Combat Veterans with Post-Traumatic Stress Disorder
   Ashley Rossi
   Faculty Sponsor(s): Melody L Hyppolite
   Social Work

15  271 Anthropogenic Waste Distribution on Two Bahamian Islands: New Providence Island and San Salvador Island
   Hannah Scarazzo, Jaimie Demaiolo
   Faculty Sponsor(s): Ronald V. Shaklee
   Anthropology

16  364 The Creation of an Artifact Database for the Woodstar site (SS-4) with the Combination of Global Information Science Technology
   Steven Campbell
17  381 Russia, Ukraine, Crimean Incident: A Report on the History of the Conflict
Jeffrey M. Bash, Catherine Cooper, Lucas Obrenski, Michael Hernandez
Faculty Sponsor(s):    David S. Porter
Anthropology

18  324 The effects of a music-based curriculum on learning, sleep quality, and
melatonin levels in children with autism
Jon Dean, Amanda Sacco
Faculty Sponsor(s):    Johanna Krontiris-Litowitz
Political Science

19  403 Credibility and Gender in Relation to Tattoos
Kaitlyn Humphrey
Faculty Sponsor(s):    Melanie Shoup-Knox
Chemistry

Session 7 - Oral Presentations (1:30-3:00)

Electrical Engineering I

01  290 Exploration of Cyber Security Through the Grid
Mark Calautti, Mark Conway, Corey Dunbar, Thomas Hornung, Brandon Mirto,
Justin Moff
Faculty Sponsor(s):    Salvatore R. Pansino
Electrical Engr Biomedical Opt

02  178 Evolution of the Current Power Grid
Ruth Lin, Jonathan Duran, Cassie George, Daniel Eich, Jacob Stracola
Faculty Sponsor(s):    Salvatore R. Pansino
Electrical Engr Biomedical Opt

03  21 Green Energy
Ryan Melichar, Chad Piccirilli, Ahmad Omisat, Paul Weidle, Josh Hobby, Josh
Henson
Faculty Sponsor(s):    Salvatore R. Pansino
Electrical Engineering

04  75 The Smart Grid
Jeffrey Wormley, Laura Corson, David Peterson, Josh Foor, Fahad Alotaibi, Mike
McGarvey
Faculty Sponsor(s):    Salvatore R. Pansino
Electrical Engineering

05  291 Smart Grid- Security
Michael Slavens, Patrick J Bollinger, Shayne C Brown, Jordan Brown, Mike J
Modelski
Faculty Sponsor(s):    Salvatore R. Pansino
Elect Engr Comp Digital Opt

06  97 Phase Plane Analysis
Andy Morgan, Chris Poullas, Elizabeth Rogenski
Faculty Sponsor(s):    Thomas D. Smotzer
Elect Engr Comp Digital Opt

Math & Biology

01  266 Capturing Software Traceability Links from Developers’ Eye Gazes
Tim Shaffer, Braden Walters, Timothy Shaffer, Huzefa Kagdi
Faculty Sponsor(s):    Bonita Sharif
Mathematics

02  258 Modeling Traffic Flows with Cellular Automata
Tim Shaffer, Eric Shehadi
Faculty Sponsor(s): George T. Yates
Mathematics

03 255 The Opium Poppy: A Hypnagogic Trance of the History and Employment of Powerful Narcotics
Floyd Kenney
Faculty Sponsor(s): Jill M. Tall
Biology

04 148 The Effects of Fluoride in Drinking Water on Sleep and Cognition.
Aaron Mrvelj
Faculty Sponsor(s): Melanie L. Shoup-Knox
Biology

05 222 Ontogeny of locomotor performance in Eastern cottontail rabbits: Hindlimb muscle architecture and fiber type.
Jacob A. Rose, Gabrielle Russo (Stoney Brook University), Jesse Young (NEOMED), Gregory Smith (Akron University)
Faculty Sponsor(s): Michael T. Butcher
Biology

06 334 In vivo strains in the femur of the nine-banded armadillo (Dasypus novemcinctus)
Joseph Copploe, Richard W. Blob, John H. A. Parrish
Faculty Sponsor(s): Michael T. Butcher
Biology

Mechanical Engineering II

01 164 Thermoelectric Generators Utilizing Excess Heat from Pellet Stoves
Matthew Conner, Chris Bowin, Caitlyn Rodomsky, Lauren Rodomsky
Faculty Sponsor(s): Matthew M. Barry
Mechanical Engineering

02 226 Pellet Stove TEGs
Ryan Lewis, Nick Onderko, Shawna Higgins, David Deckant
Faculty Sponsor(s): Matthew M. Barry
Mechanical Engineering

03 328 Pellet Stove Thermal Electric Generation Application
Thomas Bobosky, Zach Abraham, Dakota Joy, Taylor Rapovy
Faculty Sponsor(s): Matthew M. Barry
Mechanical Engineering

04 314 Thermoelectric Generators to Power Pellet Stove Heating Systems
Jacob Orwell, Chris DeChellis, Bruce Hostetter, Benjamin Tadla
Faculty Sponsor(s): Matthew M. Barry
Mechanical Engineering

05 201 Thermoelectric Generation for Pellet Stove Applications
Michael Savopoulos, Zachary Bromley, Samuel Faykus, James Schuster
Faculty Sponsor(s): Matthew M. Barry
Mechanical Engineering

06 203 Use of Thermoelectric Generators on Pellet Stove Exhaust
Matt Shar, Justin Misiura, Ryan Ward, Casey Keller
Faculty Sponsor(s): Matthew M. Barry
Mechanical Engineering

Medical Sciences II

01 383 Comparison of the small volume nebulizer to the Aerogen Solo nebulizer for the growth of infectious microorganisms
Robert Prestia
Faculty Sponsor(s): Amanda L. Roby & Maria DeLost
Respiratory Care

Clinical Polysonomnography Competencies Graded vs Pass/Fail
Aly'cia Longmire
Faculty Sponsor(s): Amanda L. Roby
Respiratory Care

A study of bodybuilders and their predisposition to sleep disorders
Alex Mostoller
Faculty Sponsor(s): Amanda L. Roby
Respiratory Care

CPR certification among faculty at elementary schools
Jill Grove
Faculty Sponsor(s): Amanda L. Roby
Respiratory Care

Inadequate Sleep During Hospital Stay and Delayed Recovery Times
Cassydy Dawson
Faculty Sponsor(s): Amanda L. Roby
Respiratory Care

Genetic testing: Does a woman choose to know or not to know her risk for breast cancer
Nicole Noday
Faculty Sponsor(s): Kimberly A. Serroka
Nursing BSN

Session 8 - Posters (2:40-3:40)

Health & Human Services  Ohio

A Burning Question: Pour Pattern or Dropdown Fabric?
Melissa James
Faculty Sponsor(s): Susan A. Clutter
Forensic Sci Chemistry Track

Are Athletes Victimized by Teachers/Administrators or are they the cause of their own Victimization?
Torrian Pace
Faculty Sponsor(s): Richard L. Rogers
Criminal Justice

Assault Rates in 30 Cities
Crystal Doyle, Nick Danailovski, Ashia Evans
Faculty Sponsor(s): John M. Hazy
Criminal Justice Bachelors

Gender Based Crime Study: The Comparisons and Differences between Regions and Crime Rates in Ohio
Kristin Helle
Faculty Sponsor(s): Richard L. Rogers
Criminal Justice

Preventing Crime with the Criminal Mind: A study of how the techniques and strategies of criminals can aid in crime prevention.
Christopher Adkins
Faculty Sponsor(s): John M. Hazy
Criminal Justice

Development of Smart and Sustainable Apparel
Katina Darkadakis, Maya Bass
Faculty Sponsor(s): Tacibaht Turel
Merch Fashion and Interior

Fashion and Social Media
Lauren Furgan  
Faculty Sponsor(s): Priscilla N. Gitimu  
Fashion Retailing

08 96 Duloxetine Hydrochloride (Cymbalta) for Fibromyalgia Treatment  
Julie L. Newman  
Faculty Sponsor(s): Valerie M. O'Dell  
MSN-Family Nurse Practitioner option

09 117 Weight Change and High Academic Stress during College Years  
Melissa Pintar, Dana Onesti, Deann Sovak, Zachary Morrison  
Faculty Sponsor(s): Zara C. Rowlands  
Coordinated Program Dietetics

10 386 Neonatal Sepsis  
Laurie McGlynn  
Faculty Sponsor(s): Susan A. Lisko  
Nursing BSN G

11 28 Women's Health Education in the Tri-County Area  
Sabrina Long, Emily Clark, Allison Armeni  
Faculty Sponsor(s): Amy L. Weaver  
Nursing BSN

12 134 Impact of Strength on Quality of Life and Physical Performance in Ambulatory Patients on Dialysis  
Ryan Guy, Cherry Valino, Jill Jonda, Caitlin Glenn, Crystal Alexander  
Faculty Sponsor(s): Jane Wetzel and Suzanne M. Giuffre  
Exercise Science PT Track

13 369 Pediatric Nursing Knowledge on Short Acting Beta Two Agonist Nebulization Treatments Vs. Metered Dose Inhaler Treatments in a Pediatric Asthmatic  
Sara Dorris  
Faculty Sponsor(s): Louise A. Aurilio  
Family Nurse Practitioner Optn

14 10 Sweet: Taste perception and artificial sweeteners  
Jessica Romeo, Allison Shay, April Michael, Cricket Murray  
Faculty Sponsor(s): Zara C. Rowlands  
Food and Nutrition Dietetics

15 405 Predicting Healthy Lifestyle Success in the College Environment using the Transtheoretical Model  
Lauren Kocher  
Faculty Sponsor(s): Joseph P. Lyons  
Master's Health

16 406 Youngstown State University Herbarium: Its History and Modern Use  
Cory B. Powell, Timothy D. Shives, Heidi J. Hall, Nicholas P. Karousis, Brandon T. Sinn  
Faculty Sponsor(s): Ian J. Renne  
Biology

Session 9 - Oral Presentations (3:30-5:00)

Electrical Engineering II  
Jones

01 333 S.H.A.D.O.W. (Solar Haptic Adjustable Device for OH WOW!)  
Michael Currao, Tyler Goodwin, Jacob Tibbits, Ryan Hicks  
Faculty Sponsor(s): Jalal Jalali  
Electrical Engineering

02 310 Plasma Speaker  
Adam Smith, Derek Dowdell, Marcell Vitello  
Faculty Sponsor(s): Jalal Jalali  
Electrical Engineering
<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Authors</th>
<th>Faculty Sponsor(s)</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>03</td>
<td>Bluetooth Low Energy Clicker Application</td>
<td>Drew Duraney, Thomas Bakalar, Janette Cross</td>
<td>Jalal Jalali</td>
<td>Electrical Engineering</td>
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<tr>
<td>04</td>
<td>SmartPark</td>
<td>David Berry, Yonatan Tadesse, Sean Lynch</td>
<td>Jalal Jalali</td>
<td>Electrical Engineering</td>
</tr>
<tr>
<td>05</td>
<td>Party On The Wall</td>
<td>Mathew Biedka, Dustin Bowman, Kenneth Burton</td>
<td>Jalal Jalali</td>
<td>Electrical Engineering</td>
</tr>
<tr>
<td>06</td>
<td>A.R.M. (Animatronic Response to Motion)</td>
<td>Lassry Frangos, Michael Robison, Nick Sirianni, Joshua Welsh</td>
<td>Jalal Jalali</td>
<td>Elect Engr Comp Digital Opt</td>
</tr>
</tbody>
</table>

**Interpersonal Relationships**

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
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<th>Faculty Sponsor(s)</th>
<th>Department</th>
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<tbody>
<tr>
<td>01</td>
<td>Parenting styles as a model for university teaching styles: Connections to motivation and student achievement</td>
<td>Joshua Stephens</td>
<td>Molly Jameson Cox</td>
<td>Psychology</td>
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<td>02</td>
<td>Why Can't We Be Friends?: A Study of Workplace Friendships</td>
<td>Julianna Marsco</td>
<td>Rebecca M. Curnalia</td>
<td>Comm St Interpersonal Track</td>
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<tr>
<td>03</td>
<td>I Thought You Would Be Taller: Self-Presentation and Uncertainty Reduction Theory in Online Dating.</td>
<td>Rachael Thomas</td>
<td>Rebecca M. Curnalia</td>
<td>Comm St Interpersonal Track</td>
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<td>04</td>
<td>The Pen-Pal Project: Assessing the Effects of Interscholastic Pen-Pal Correspondence on the Writing Development of Elementary School Students.</td>
<td>Megan Evans</td>
<td>Cynthia L. Vigliotti</td>
<td>Individual Curriculum Program</td>
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</tbody>
</table>

**Mechanical Engineering III**

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Authors</th>
<th>Faculty Sponsor(s)</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Modification and Exposé of a Hexapedal Robot</td>
<td>Massey Fowler, Mark Calautti, Brett Comeau, Tim Daugherty, Lauren Jancay, Michael Slavens, Bryan Zilka</td>
<td>Jason A. Zapka</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>02</td>
<td>Failure Analysis of Ultrasonic Welds of Aluminum Cables to Brass Terminals Using Analytical Electron Microscopy</td>
<td>Brandon Hart</td>
<td>Virgil C. Solomon</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>03</td>
<td>Scanning Electron Microscopy (SEM) Investigation of Alumina Ceramic Coatings on FeCrAl Foils</td>
<td>Matthew Lehman</td>
<td>Virgil C. Solomon</td>
<td>Mechanical Engineering</td>
</tr>
</tbody>
</table>
04 340 Development of Procedure to Define the Crystal Structure of Possible Ternary Phase in AL-Si-Ti Alloy System
   Jacob Cvetich, Matt Zeller
   Faculty Sponsor(s): Virgil C. Solomon
   Mechanical Engineering

05 330 Characterization of crystallographic imperfections in ZnO thin films synthesized by radio-frequency magnetron sputtering
   Matthew Kelly
   Faculty Sponsor(s): Virgil C. Solomon
   Materials Science and Engineering

06 90 Comparison of Uniform and Delta doped p-type ZnO Thin Films
   RaviChandra Reddy Gade
   Faculty Sponsor(s): Tom N. Oder
   Electrical Engineering

Physics & Computer Science

Humphrey

01 210 Experimental Physics: Calculating the Radius of the Earth using Solar Displacement and Global Positioning Systems
   Andy Morgan
   Faculty Sponsor(s): Snjezana Balaz
   Elect Engr Comp Digital Opt

02 172 Constructing an Education Tool and a Scientific Machine
   Christopher Karlic
   Faculty Sponsor(s): John J. Feldmeier
   Physics Astronomy

03 112 ZnO/metal layered 3D Photonic crystals
   Michael McMaster
   Faculty Sponsor(s): Tom M. Oder & Donald Priour
   Physics

04 338 Duplicate Bug Detection
   Sarah Ritchey
   Faculty Sponsor(s): Alina Lazar & Bonita Sherif
   Computer Science

05 154 Finding Patterns and Strategies in Developers' Eye Gazes on Source Code
   Leela Krishna Yenigalla, Sruthi Bandarupalli
   Faculty Sponsor(s): Bonita Sharif
   Computer Science

06 402 Determining Static and Dynamic Coefficient of Friction
   Michael Kaldy, Ryan White, Matt English, A. J. Grayson
   Faculty Sponsor(s): Hazel Marie
   Mechanical Engineering