
brother joseph w
stander
symposium
2012
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brother joseph w

stander symposium

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Letter from the President and Provost

April 2012

Dear Colleagues and Guests,

Welcome to the Brother Joseph W. Stander Symposium, the University of Dayton's annual celebration of academic excellence. This spring event exemplifies our mission to be a "community of learners" here at the University of Dayton. Through exceptional undergraduate and graduate student research, artwork, and performance, the Stander Symposium epitomizes the tradition of Marianist education.

We would like to offer our gratitude to the University's faculty and staff. Your lasting commitment and enthusiasm for success are the building blocks of this annual tradition. The road to student accomplishment is paved through your achievements.

On behalf of the University of Dayton, we thank you for joining us for this year's Stander Symposium, and we wish you an exciting and engaging learning experience.

Sincerely,

Daniel J. Curran, Ph.D.
President

Joseph E. Saliba, Ph.D.,
Provost

Letter from the Co-Chairs

April 2012

Dear Members of the UD Community,

We are delighted to officially welcome you to the annual Brother Joseph W. Stander Symposium. The Stander Symposium showcases individual and collaborative undergraduate and graduate research, creative endeavors, and academic achievements. Above all, the Symposium and your participation showcase our shared values as members of the University of Dayton community. This is the 23rd year of the Symposium, honoring the late Bro. Joseph W. Stander, S.M., Professor of Mathematics and Provost (1974–1989).

This University-wide celebration of academic excellence exemplifies the Marianist tradition of learning in community. The Symposium's alternate day of learning includes poster sessions, hands-on activities, performances, art exhibits, oral presentations and highlights of capstone course work. The achievements and collaborations on display throughout the Stander Symposium reflect the continuing commitment of students and faculty to this great tradition.

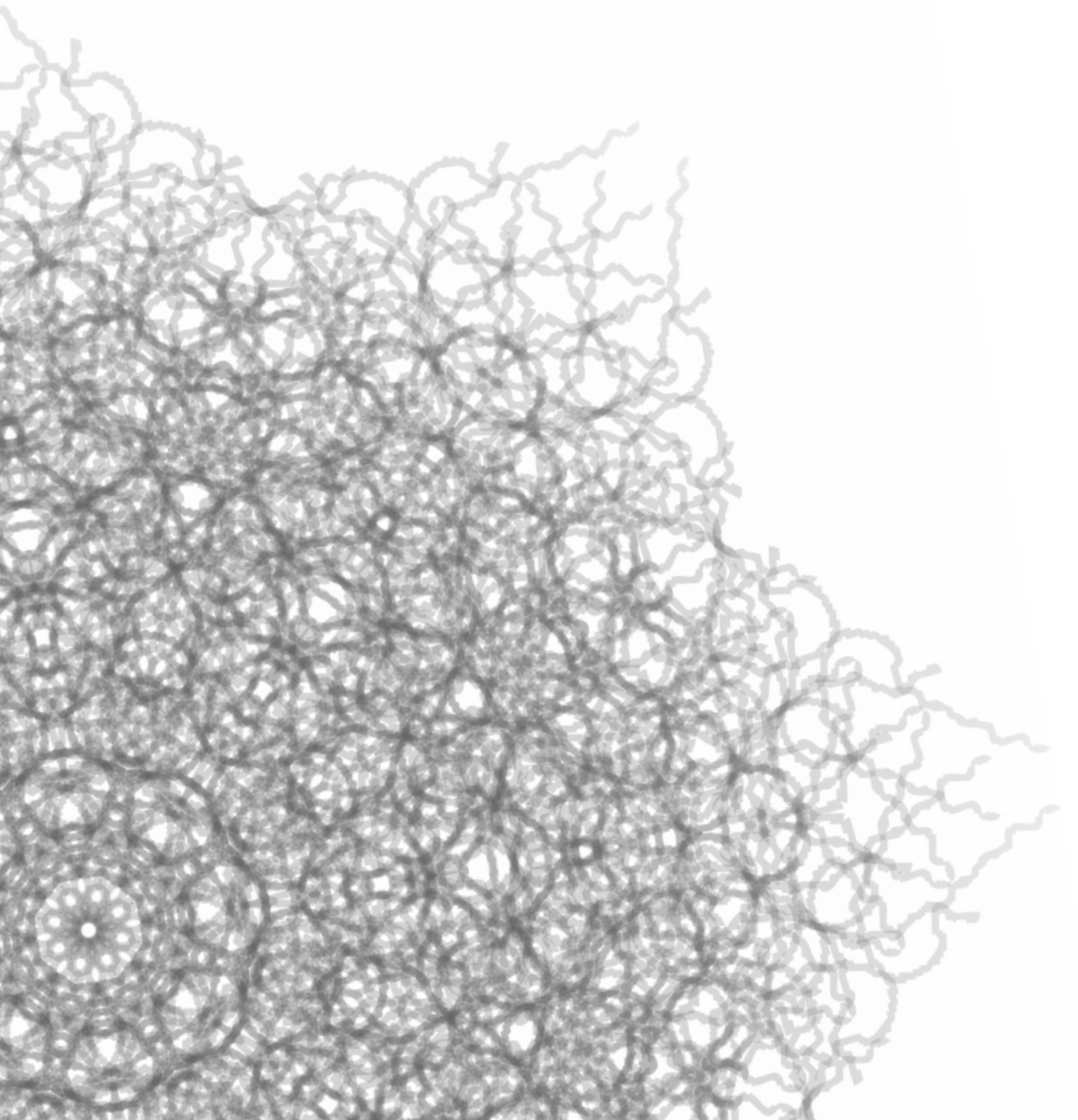
The Stander Symposium would not exist without an extraordinary effort from across the campus community – students, faculty and staff. On behalf of the Stander Symposium Steering Committee, we thank you for your support and participation.

Sincerely,

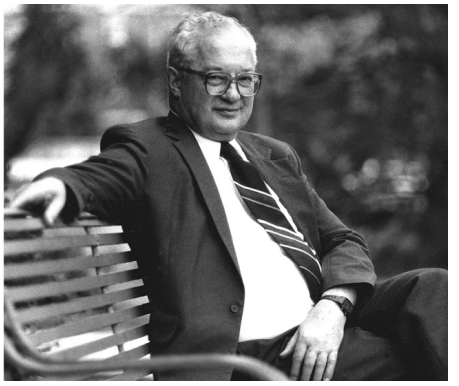
Linda Hartley, Ph.D.
Professor,
Music Department
Co-Chair, Stander Symposium

Shawn Swavey, Ph.D.
Associate Professor,
Chemistry Department
Co-Chair, Stander Symposium

About the Symposium



About the Stander Symposium



Brother Joseph W. Stander, S.M.
Professor of Mathematics
Provost (1974 - 1989)

Honoring the late Brother Joseph W. Stander, S.M., Professor of Mathematics and Provost (1974-1989), the Stander Symposium celebrates academic excellence, rich collaborations and many forms of intellectual, artistic, and spiritual growth. The career of Brother Joe embodied the spirit of collaboration and the Stander Symposium stands as a continuing tribute to him and all who carry on the Marianist tradition of education through community.

A distinctive spirit permeates student research at the University of Dayton. The faculty and students of the University are determined that "a community of learners" is not a cliche but a realistic goal. Thus the University fosters an atmosphere that nurtures productive collaboration and a shared search for excellence in learning and in research. The Stander Symposium is a day-and-a-half long event, and constitutes the University of Dayton's principal annual celebration of academic excellence. The Symposium features a keynote speaker, poster sessions, hands-on activities, performances, exhibits, oral presentations and highlights of capstone course work.

All students at the university engaging in research, creative endeavors, and other forms of innovative thinking are encouraged to participate in this student research symposium. Student attendees are key members of a critically reflective audience for their peers. Faculty members serve as mentors and leaders for many of these projects and are the driving force behind scholarship in their fields. The efforts of students, faculty, and staff are critical to making this event successful year after year.

Acknowledgments

The Brother Joseph W. Stander Symposium Steering Committee thanks the students, faculty, and staff for their many contributions and university-wide collaboration in the planning of this years' symposium. With over 1,700 presenters, performers, artists, and faculty mentors participating, the Stander Symposium is a lasting tribute to Bro. Joseph Stander and to the Marianist principles of higher education.

For generous support, we specifically owe gratitude to the Office of the President, the Office of the Provost, the Offices of the Deans in the College of Arts and Sciences, School of Business Administration, School of Education & Allied Professions, School of Engineering, Graduate Education, and University Libraries. We extend this gratitude to the Ryan C. Harris Learning Teaching Center, the University Honors Program, the Research Institute, Enrollment Management, Student Development, Student Government Association, and University Advancement.

In addition to the units represented by the Steering Committee membership, the Committee specially acknowledges the essential and considerable planning and staff assistance received from Kennedy Union, Campus Ministry, Roesch Library, KU Box Office, ArtStreet, Department of Recreational Sports, Department of Visual Arts, Department of Music, Keck Lab, and University of Dayton Information Technology (UDit).

Finally, very special thanks are due to students Gerard Gerace and Kelly Kleinschmidt for their efforts in developing and creating this year's visual design. And to Katy Utter and Kathleen Gaffney our interns for their efforts on this year's symposium activities.

Committee Recognition

Co-Chairs

Linda Hartley, Professor, Department of Music
Shawn Swavey, Associate Professor, Department of Chemistry

Steering Committee

Deborah J. Bickford, Office of the Provost
Susan Byrnes, ArtStreet
David Darrow, University Honors Program
John Doty, Department of Engineering Management and Systems
Brad Duncan, Graduate, Professional, and Continuing Education
Rick Ghere, Department of Political Science
Elizabeth Gustafson, School of Business Administration
Judith Huacuja, Department of Visual Arts
Kathryn Kinnucan-Welsh, Department of Teacher Education
Amy Lopez-Matthews, Student Life & Kennedy Union
Mike O'Hare, Department of Physics
Patrick Reynolds, Department of Music
Sukh Sidhu, Department of Mechanical and Aerospace Engineering
Cari Wallace, New Student Programs
Kathleen Watters, Department of Communication
Kathleen Webb, University Libraries

Celebration of the Arts Committee

Darrell Anderson, Director, Theatre Program
Paul Benson, Dean College of Arts & Sciences
Susan Byrnes, Director, ArtStreet
Sharon Gratto, Chair, Department of Music
Judith Huacuja, Chair, Department of Visual Arts
Patrick Reynold, Department of Music
Teri Rizvi, University Communications

Graphic Design

Gerard Gerace, Visual Communication Design, Department of Visual Arts '12
Kelly Kleinschmidt, Visual Communication Design, Department of Visual Arts '13

Celebration of the Arts Intern

Kathleen Gaffney, Communication and Visual Arts '14

Marketing and Events Intern

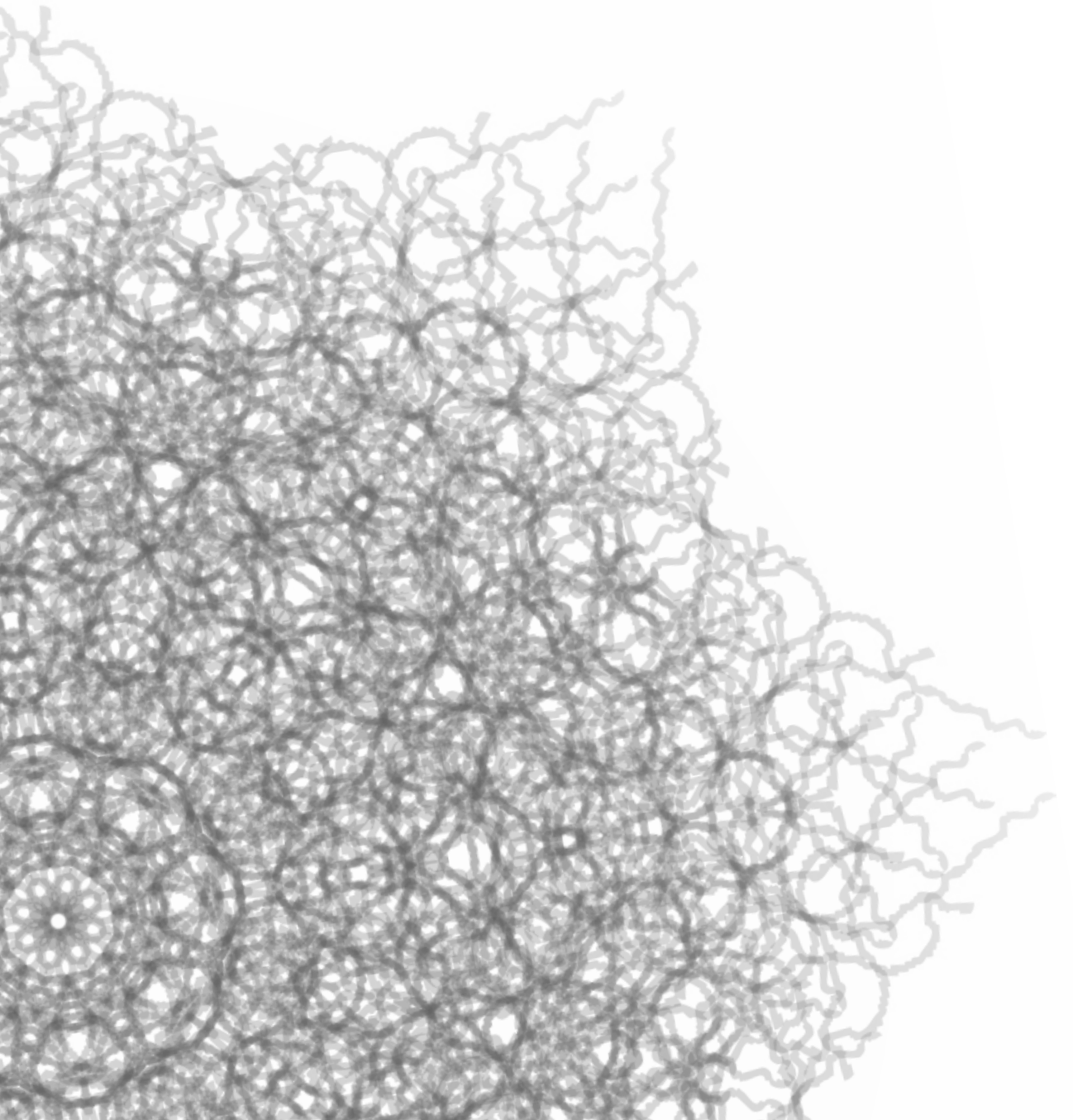
Katy Utter, Marketing and Entrepreneurship '14

Stander Coordinator

Andrea Meyer Wade

Schedule of Events

APRIL 2012



Monday, April 16

MASS OF THE HOLY SPIRIT Immaculate Conception Chapel, 12:05 PM

The liturgical opening of the Stander Symposium. The Symposium is dedicated to the research we do as students and faculty; through it we seek wisdom, which is of God.

KEYNOTE ADDRESS BY DAVID SUZUKI RecPlex-Main Gym, 7:30 PM

David Suzuki, co-founder of the David Suzuki Foundation, is an award-winning scientist, environmentalist, and broadcaster. He is renowned for his radio and television programs that explain the complexities of the natural sciences in a compelling, easily understood way. Dr. Suzuki is a geneticist and is also recognized as a world leader in sustainable ecology. He is the recipient of UNESCO's Kalinga Prize for Science, the United Nations Environment Program Medal, UNEPs Global 500 and in 2009 won the Right Livelihood Award that is considered the Alternative Nobel Prize.

Tuesday, April 17

CELEBRATION OF THE ARTS Schuster Center, 8:00 PM

OPENING PERFORMANCE

An evening of inspiring and entertaining music, theatre, dance and visual art. The event showcases excellence in creativity and performance—all by UD students.

Wednesday, April 18

DAY AT THE STANDER RecPlex, Kennedy Union and Various Campus Locations, 9:00 AM-5:00 PM

For more than 20 years, the Stander Symposium has acted as an annual showcase where both undergraduate and graduate students are invited to showcase their research, creative endeavors and academic achievements. We celebrate the symposium as a day of alternate learning by canceling all regularly scheduled courses and meetings-instead inviting the whole University to engage in conversation, learning and panel discussions-outside of the classroom. A closing reception for all student presenters and faculty advisors will be held at 5 PM in the CPC Gallery 249.

CELEBRATION OF THE ARTS UD CPC Gallery 249, 5:00-7:00 PM

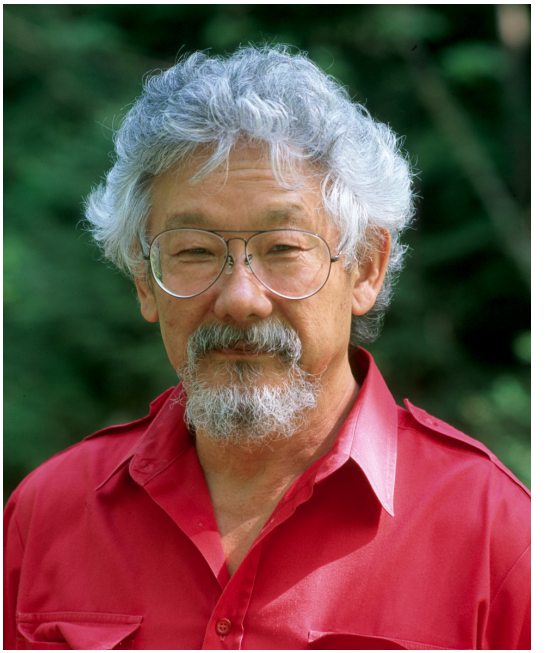
CLOSING VISUAL ARTS EXHIBITION AND RECEPTION

The Department of Visual Arts will host an evening of open studios as the closing event to the University's annual Stander Symposium. The evening will feature student exhibitions, art making workshops and the awards ceremony for the annual Horvath Exhibition, a juried exhibition highlighting student artwork. The event is free and open to the public.

Dr. David Suzuki
2012 Keynote Speaker

Monday, April 16, 2012
7:30 PM
RecPlex - Main Gym
University of Dayton Speaker Series Co-Sponsored event
Book signing to follow talk.

"The Challenge of the 21st Century: Setting the Real Bottom Line"



David Suzuki, co-founder of the David Suzuki Foundation, is an award-winning scientist, environmentalist, and broadcaster. He is renowned for his radio and television programs that explain the complexities of the natural sciences in a compelling, easily understood way.

Dr. Suzuki is a geneticist. He graduated from Amherst College (Massachusetts) in 1958 with an honors BA in Biology, followed by a PhD. in Zoology from the University of Chicago. He has won numerous academic awards and holds 19 honourary degrees. Dr. Suzuki is also recognized as a world leader in sustainable ecology. He is the recipient of UNESCO's Kalinga Prize for Science, the United Nations Environment Program Medal, UNEPs Global 500 and in 2009 won the Right Livelihood Award that is considered the Alternative Nobel Prize.

celebration of the arts

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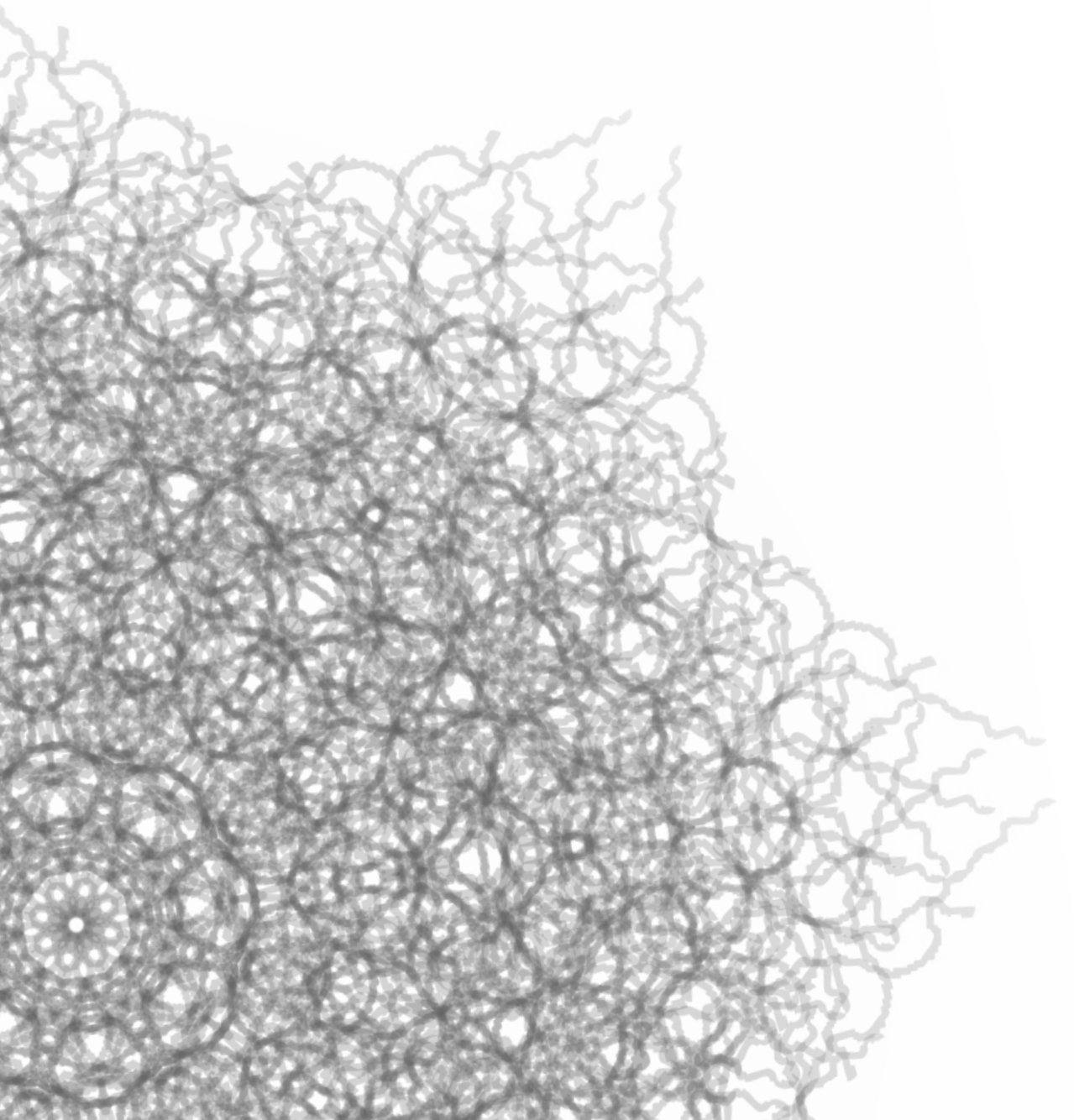
TUESDAY, APRIL 17, 2012 — SCHUSTER CENTER
WEDNESDAY, APRIL 18, 2012 — COLLEGE PARK CENTER GALLERY 249



Tuesday, April 17
Schuster Center, Downtwon Dayton

Pre-Show Performances & Visual Arts Display

6:30 PM in the Wintergarden

Javanese Gamelan
Heather MacLachlan, Director

Piano Ensemble
Eric Street, Director

Early Music Ensemble
Samuel N. Dorf, Director
Julia Mintzer, Artist-in-Residence with Dayton Opera, Guest Director

Installation Art in the Wintergarden
Michael Casselli, Instructor

Theresa Behrens
Andrew Calvin
Breann Gabel
Anne Gerker
Jesse Helmers
Kelly Merecicky
Sean Montgomery
Donald Rambacher
Carrie Sexton

The work being presented by the students in the Installation Art Site project is an investigation into site specific projects. The work takes into consideration the physical and contextual meaning of site specificity and is a reflection on the affect that the space has had on the artists involved both as architecture and as a site of public interaction. The intent is to engage the space and transform it though the use of materials that specifically make use of light and sound, and present the viewer with the idea that art does not necessarily have to be about an object that is viewed but can exist as an idea and as an experience.

Visual Arts Display in the Wintergarden

Mark Albain
Darlin Blanco-Lozano
Caitlin Douglas
Luke Effler
Lauren Graehler
Erin Gottron
Lisa Lorek
Brandon Lowry
Courtney Morgan
Rebecca Roman
Kristen Tellaisha
Seth Wade
Paige Windgassen

Tuesday, April 17

Schuster Center, Downtwon Dayton

Celebration of the Arts Program

8:00 PM in the Mead Theatre

Aztec Dance, from La Fiesta Mexicana — H. Owen Reed

The Symphonic Wind Ensemble
Patrick Reynolds, Conductor

Welcome
Neenah Ellis, General Manager, WYSO-FM

University of Dayton Welcome
Paul Benson, Dean, College of Arts and Sciences

El Vito Spanish Folk Song — arr. Jim McCutcheon

University of Dayton Guitar Ensemble
Jim McCutcheon, Director

Already Here — Brian Courtney Wilson
Choreography: Crystal Michelle — Cinematic Orchestra

University of Dayton Dance Ensemble
Richard Mosley, Artistic Director

Dayton Contemporary Dance Company 2
Shonna Hickman-Matlock, Artistic Director

Cityscapes (2005) II: The Lower East Side — Rick Hirsch

First Flight Saxophone Quartet
Willie L. Morris III, Director

Shumayela ivangeli (Preach the Gospel) — Traditional Xhosa freedom song from South Africa

African Welcome Piece — Michael Udow ed. Fred Wickstrom

World Music Choir
Sharon Davis Gratto, Director

Percussion Ensemble
James Leslie, Director

CELEBRATION OF THE ARTS

Farewell to Red Castle — Kerry Turner (1995)

University of Dayton Horn Choir
Richard Chenoweth, Director

Moanin', Charles Mingus — arr. Sy Johnson
Category 4 — Jeff Jarvis

Matthew Schroeder, baritone saxophone
Peetr Ceronne, guitar

Dayton Jazz Ensemble
Willie L. Morris III, Director

Speaking on the Arts

Neenah Ellis, General Manager, WYSO-FM

"Tell me how that felt," she asked. "Please?"

Orpheus Magazine Reading
Erin Quinn

Gloria (From Missa Kenya) (1963) — Paul Basler
There Was a Time (1979) — Eric William Barnum

John Benjamin, piano

University of Dayton Chorale
Robert Jones, Conductor

"Ben&Jerry's"

Orpheus Magazine Reading
Donald Rambacher

Danza Final "Malambo" from Estancia — Alberto Ginastera

The University Orchestra
Patrick Reynolds, Conductor

Eleemosynary (excerpt) — Lee Blessing

University of Dayton Theatre
Tony Dallas, Director

Even Me — arr. Michael H. Reid
I Love Him — Clint Brown

Ebony Heritage Singers
Donna M. Cox, Director

Victory March	M. Gelmo
In the Stone	M. White, D. Foster, and A. Willis arr. P. Murtha
Go Dayton Flyers	Anonymous
Neck	Anonymous

Pride of University of Dayton Marching Band
Tremon Kizer, Director
James Leslie, Assistant Director

Wednesday, April 18

UD College Park Center, Gallery 249

Celebration of the Arts
Closing Visual Arts Exhibition & Reception

5:00-7:00 PM

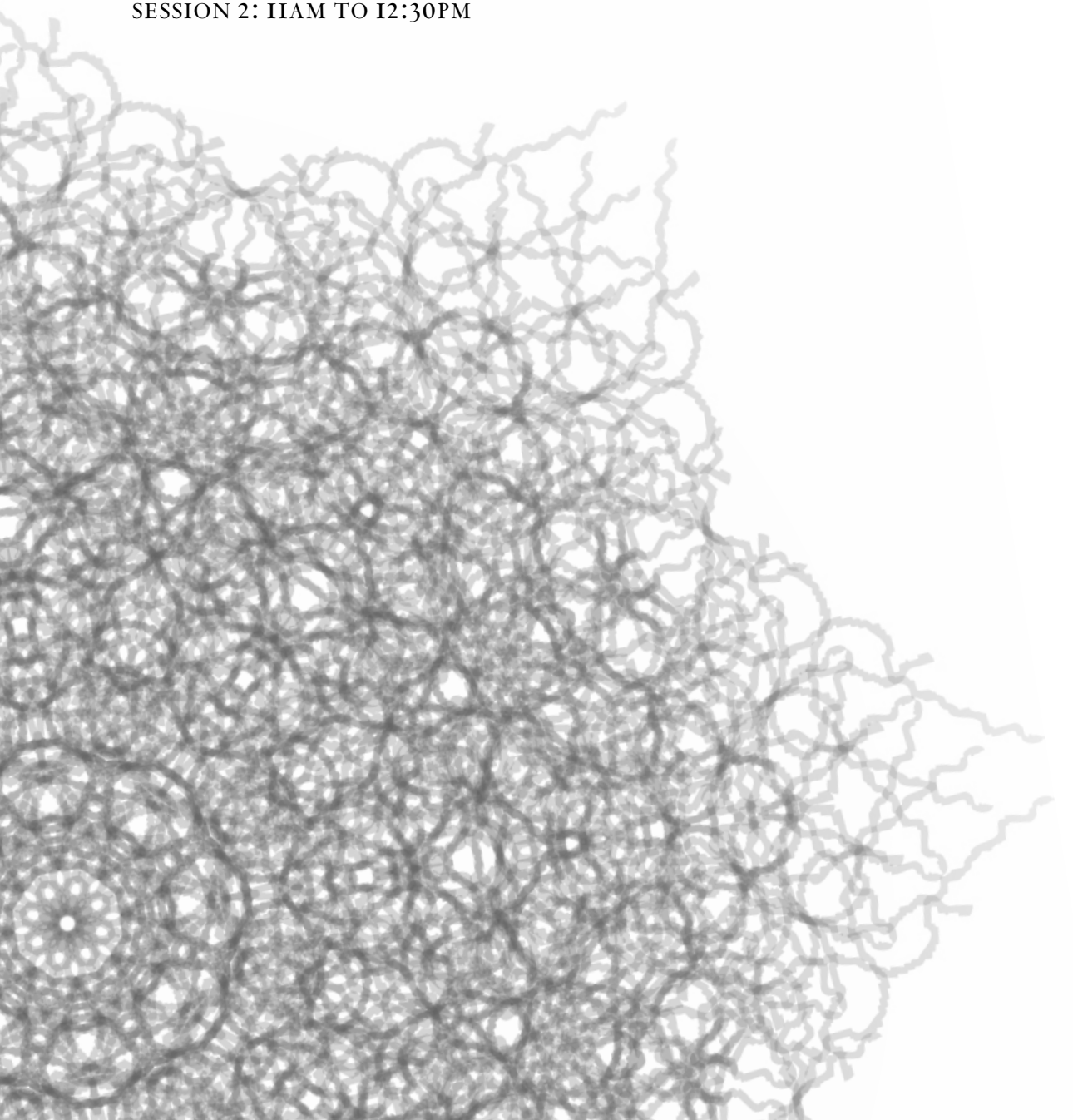
The Department of Visual Arts will host an evening of open studios as the closing event to the University's annual Stander Symposium. The evening will feature student exhibitions, art making workshops and the awards ceremony for the annual Horvath Exhibition, a juried exhibition highlighting student artwork. The event is free and open to the public.

The Horvath Student Juried Exhibition is an annual juried exhibit, open to students of all majors, that started in 1975. The Horvath Exhibition features UD student work in a variety of media, such as drawings, paintings, photography, design, ceramics and sculpture.

The Horvath Exhibition originally was funded by Josephine Horvath, in memory of her late husband, Bela Horvath, a realist painter and faculty member who came to UD after fleeing Hungary.

Poster Sessions

WEDNESDAY, APRIL 18, 2012
SESSION 1: 9AM TO 10:30AM
SESSION 2: 11AM TO 12:30PM



COLLEGE OF ARTS AND SCIENCES

A model to study the influence of Hippo signaling on local cell-cell interactions.

Presenter(s): Katelin E Hanes, Hailey Kwon, Alyssa C Lesko, Shilpi Verghese, Indrayani Waghmare
Advisor(s): Madhuri Kango-Singh, Amit Singh
Biology - Graduate Research

The Hippo pathway regulates organ size from flies to mammals. Molecular genetic approaches in Drosophila established the crucial foundation of the mechanisms of signal transduction and function of the Hippo pathway. Recent studies uncover a role for Hippo pathway in phenomena involving local cell-cell interactions like cell competition or compensatory proliferation. Hyperactivation of Yorkie (Yki) is crucial for compensatory proliferation, cell competition,and regenerative growth. We have studied the micro-environment of scribble (scrib) mutant cells to gain insights into the competitive ability of scrib mutant cells in the context of changes in Yki activity. scrib is a neoplastic tumor suppressor gene and loss of scrib in homozygous larvae causes massive tumors to form. However, somatic clones comprising scrib mutant cells are slow growing and are competed out by the surrounding wild-type cells by activation of JNK mediated apoptosis. We note that scrib mutant cells survive and proliferate when additional mutations in scrib mutant cells either accelerate their proliferation or favor reduced cell competition (e.g., in Minute heterozygous background). We found that JNK and Hippo signaling both play an important role in the growth and survival of scrib mutant cells. Furthermore, activation of JNK can suppress the over-growth of Yki over-expressing cells. We decided tocompare the clone size and Hippo pathway read-outs (ex-lacZ, diap1-lacz or diap-GFP) in five conditions viz., scrib-/-, scrib-/- M/+; scrib-/- + P35, wts-/- scrib-/- and RasV12 scrib-/-. Our preliminary data shows that the interaction of scrib mutant cells with the surrounding wild type cells differ for each genotype. Here we present our analysis of Yki activity in scrib mutant cells challenged with different cell competitive environments.

An evolutionary characterization of regulatory linkages in a genetic network for an evolved fruit fly trait.

Presenter(s): John C Butts, Connor W McNamee
Advisor(s): Thomas M Williams
Biology - Graduate Research

Phenotypes are the culmination of spatial and temporal patterns of gene expression (protein production) for many genes comprising a genetic network. These patters are controlled by cis-regulatory elements (CREs) and genes are connected into networks when a CRE regulating its expression possesses binding sites for network transcription factor proteins - so called regulatory linkages. Gains and losses of linkages are a suspected common route of CRE and network evolution; though, their emergence remains poorly understood as few case have revealed the before and after states in sufficient detail. We study abdominal pigmentation of Sophophora fruit fly species, where male-specific pigmentation (e.g. Drosophila melanogaster) evolved from a monomorphic ancestral state. A key modification to the pigmentation network was the evolved sexually dimorphic expression of the Bab transcription factor proteins. These proteins turn off expression of the yellow and tan genes that are required for pigmentation. The research presented here addresses two questions. First, does Bab form regulatory linkages with CREs that control the male-specific expression of the Drosophila melanogaster yellow and tan genes? Second, when in the history of Sophophora were these CREs and their regulatory linkages gained? To answer these questions we are: systematically mutating CRE sequences to find those needed to integrate the repressive effects of Bab, and evaluating the regulatory activities of sequences related to the Drosophila melanogaster CREs. Future studies will explore whether this divergence included the gain of Bab binding sites in dimorphic species or whether these binding sites were ancestral and conserved during trait evolution.

Aquaglyceroporin expression and erythrocyte osmoregulation in cultures from freeze tolerant anuran, Cope's gray treefrog, Hyla chrysoscelis.

Presenter(s): Venkateshwar Mutyam
Advisor(s): Carissa M Krane
Biology - Graduate Research

Cope's gray treefrog, Hyla chrysoscelis is a freeze tolerant anuran that accumulates glycerol during cold acclimation. We hypothesize that the osmoregulatory capabilities of erythrocytes--to tolerate changes in cell volume and to affect rapid water and solute fluxes--are likely to be most

important during the events of freezing and thawing, and are dependent upon the expression and function of HC-3, an ortholog of the aquaglyceroporin AQP3. Erythrocytes of H. chrysoscelis cultured for 48 hrs in media made hyperosmotic (400 mOsM) through the addition of 150 mM glycerol or urea showed enhanced HC-3 glycosylation and membrane localization compared to those cultured in control or hypertonic media (250 mOsM culture media + 150 mM sorbitol or 75 mM NaCl). Cultured erythrocytes transferred from hyperosmotic culture media (glycerol or urea) to a hypotonic solution containing 250 mM glycerol or urea underwent a series of shape changes as they swelled, initially elongating, then becoming swollen and round. Cells cultured in hypertonic media (sorbitol or NaCl) responded with significantly less osmotically-induced swelling (i.e. cell shape change). When aquaporins were blocked by HgCl2, cells retained normal dimensions, indicating the importance of aquaporins in conferring water and solute permeability in these cells. Funding for this research was provided through an NSF Research Grant IOS-1121457 and University of Dayton Graduate Summer Fellowship support.

Comparison of Biofilm Growth on Lonicera maackii and Prunus serotina in a stream environment using Fluorescent Microscopy and Scanning Electron Microscopy

Presenter(s): Anastasia I Stolz
Advisor(s): Ryan W McEwan
Biology - Independent Research

Lonicera maackii, or Bush Honeysuckle is an invasive plant that is becoming quite the problem in parts of Ohio. The leaf litter of L. maackii ends up in the streams, replacing the leaf litter from native species which microorganisms within the stream use for food. This experiment was preformed to observe the differences in biofilm growth on the leaf litter of Lonicera maackii and the native plant, Prunus serotina, or black cherry, using Scanning Electron Microscopy (SEM) and Fluorescence Microscopy. Samples of Amur Honeysuckle and black cherry leaves were collected and placed in leaf bags, then left in the stream for biofilm to develop for 3 days. After this time had elapsed, the samples were collected and prepared for microscopy. Once prepared, the leaves were observed using fluorescent microscopy and SEM. The samples were then compared to prepared fresh leaf samples of the two species, then compared to each other. It was observed that the biofilm growth on Lonicera maackii was noticeably more developed than the biofilm growth on Prunus serotina. It was also observed that the hairiness of the L. maackii leaves was a determining factor in the growth of biofilm. This was likely the reason why the biofilm developed better on the hairy L. maackii rather than the flat P. serotina. This result also suggests that the introduction of L. maackii into a stream has an effect on a stream ecosystem.

Comparison of Notophthalamus viridescens Transposon Expression in the Dorsal and Ventral Iris during Lens Regeneration

Presenter(s): Glenna M Knape
Advisor(s): Panagiotis A Tsonis
Biology - Honors Thesis

The Eastern Newt, Notophthalamus viridescens, has regenerative abilities. This study delved into the ability of the newt to regenerate the lens of its eye from the iris following a lentectomy surgery. To regenerate, the dorsal and ventral regions of the iris dedifferentiate and proliferate, yet only the dorsal iris redifferentes to create a lens, rather than both the dorsal and ventral iris. Several candidate transposons, or sections of viral DNA incorporated into another organism's genome, were selected from a transcriptome to study. In order to compare the differences between the dorsal and ventral irises, the candidate genes' expression levels were monitored in regenerating lens at 0, 4, and 8 day time points following the surgery. The expression levels were compared to determine whether they are correlated with the regenerative ability. A further understanding of the newt's regenerative abilities as a model organism could lead to groundbreaking advances in regenerative biology and medicine.

defective proventriculus (dve), a new member of DV patterning in the eye.

Presenter(s): Oorvashi Roy G Puli
Advisor(s): Amit Singh
Biology - Graduate Research

Axial patterning is crucial to eye development. During eye development, Dorso-ventral (DV) axis determination is the first lineage restriction event. The early eye primordium begins with the default ventral fate on which the dorsal eye fate is established by expression of a GATA-1 transcription factor, pannier (pnr). Loss-of-Function (LOF) of pnr results in dorsal eye enlargements and antennal duplications in adult flies. We found

similar phenotypes in LOF of defective proventriculus (dve), which encodes a homeobox protein. We investigated if dve plays a role in axial patterning during early eye development. We found that Gain-of-Function (GOF) of dve results in suppression of eye by downregulating Retinal Determination (RD) genes. We found that dve plays an important role in dorsal eye fate selection during early eye development. In the eye imaginal disc, Dve expression is restricted to a small region anterior to the Morphogenetic Furrow (MF) on the dorsal eye margin. This expression domain of Dve also overlaps with Wingless (Wg), which is expressed at the lateral margins of the developing third instar eye discs. Interestingly, we found that dve is required to maintain a Wg morphogen gradient in the developing Drosophila eye field to promote DV patterning of the Drosophila eye. Here we present insights into the novel role of dve in dorsal eye fate selection in the Drosophila eye.

Domain specific E3 ubiquitin ligase mediated Wingless degradation promotes Dorso-Ventral lineage in the developing Drosophila eye

Presenter(s): Meghana Tare
Advisor(s): Amit Singh
Biology - Graduate Research

During early eye development, axial patterning transforms a single sheet of organ primordium cells to a three-dimensional organ by generating Dorso-ventral (DV), antero-posterior (AP), and proximo-distal (PD) axes. Drosophila eye anlagen initiates with a ventral ground state on which the dorsal eye fate is established, which requires a large number of eye specific proteins. Members of the Notch signaling pathway, Lobe (L; PRAS40 in vertebrates) and Serrate (Ser; Jagged-1 in vertebrates), play an important role in ventral eye growth and development. Loss of function of L/Ser results in loss of ventral half of the eye. In a genetic modifier screen, cullin-4 (cul-4) was identified as a modifier of L mutant phenotype in the ventral eye. cul-4 encodes an E3 ubiquitin ligase - an enzyme that ligates ubiquitin molecules to the proteins targeted for degradation. However, the pathway through which cul-4 exerts its effects on L is not known. Using Drosophila eye as a model system, we characterized the functions of cul4, and its interactions withL using loss and gain of function approaches. Our studies suggest that cul-4 acts downstream of L, and promotes cell survival in the ventral region of the developing eye by targeting Wingless (Wg) signaling components for degradation. Here we present a novel mechanism of DV specific ubiquitin mediated protein degradation that promotes and maintains dorsal ventral (DV) lineage in the developing early eye field.

Effects of Dietary Regimen on Lifespan and Fecundity of Blow Fly, Lucilia sericata (Diptera: Calliphoridae)

Presenter(s): Allissa M Blystone, Ryan M Huttinger, Connor Ratycz
Advisor(s): Karolyn M Hansen
Biology - Independent Research

The green bottle fly, Lucilia sericata, is a forensically important organism that is used to determine post-mortem interval (PMI) in deceased individuals. Insect colonization and species succession on decaying organic material are well-characterized events with Lucilia sericata being one of the first species to colonize. Forensic methods for determination of PMI using insect developmental stages have been developed based on laboratory methods for culture of insect species but there is no standard method for laboratory culture of Lucilia with respect to diet. This study focuses on the role of diet in the development of the blow fly, Lucilia sericata. Flies were reared using three common laboratory dietary regimens: 1. Honey-Water and Water, 2. Liver and Water, and 3. Granular Sucrose and Water. For each dietary treatment, three replicate cages of 15 male flies and 15 female flies were run simultaneously. Developmental metrics were recorded (survivorship, number of eggs oviposited per event, and number of oviposition events) over the course of the study and data were analyzed to determine which diet was most efficient for fly maintenance and reproduction. Analyses revealed that flies fed honey-water and water lived an average of 37 days but did not lay any eggs. Flies fed liver and water lived an average of 22 days and laid an average of 300 eggs per cage. Flies fed sucrose flies lived an average of 30 days, but similar to the honey-water treatment, no eggs were laid. These results indicate that a protein source is necessary for the female egg production and support the premise that standard laboratory culture methods are a critical link between establishment of a standard developmental life cycle pattern and application of life cycle staging in forensic determination of PMI. Future research will focus on refinement of a standard balanced laboratory diet.

Functional and Genetic Analysis of Compensatory Responses Induced in Tumors Caused by Loss of Scribble (apical-basal polarity).

Presenter(s): Alyssa C Lesko, Shilpi Verghese
Advisor(s): Madhuri Kango-Singh
Biology - Independent Research

The Hippo pathway has recently been identified to regulate the proliferation and survival of cells. Scribble is a tumor suppressor gene that is involved in cell polarity. There is evidence that cell death induction in the scribble mutant cells is correlated to an increase in Jun N-terminal Kinase (JNK) signaling due to activation of cell competition. However, increased survival of scrib mutant cells leads to growth of massive tumors. One way in which dying cells stimulate proliferation is called compensatory proliferation. Many distinct compensatory mechanisms are now known that involve the action of caspases, mitogens and cell signaling pathways. My project will investigate how changes in Hippo signaling are important to cell-cell interactions. Our previous work showed that JNK and Hippo pathway interact. We have also investigated the correlation of several phosphorylated proteins that belong to the JNK and Hpo pathway, to the loss of scribble in Western blot experiments. It was seen that scribble mutants showed increased levels of these phosphorylated proteins compared to wild type and double mutant cells. We hypothesize that this interaction determines if tumor cells survive or are eliminated. To test this, I will look at the role of JNK when it is activated and down regulated in the Hippo pathway, as well as, its interaction with scribble. Genetic experiments will be used to study these interactions. Flies expressing the nubGal4 UASHpoÎNH, and nubGal4 UASHpoRNAi will each be crossed to several target mutants. These targets are diap14.3GFP,ex-lacZ,fj-lacZ, and dronc1-7kb-lact. The phenotypes of these crosses will be studied, and antibody staining of the eye and wing discs will be used to investigate cell to cell interactions. Our findings from these studies will be presented.

Get Fit, Save Energy; Powering the Rec Through Energy-Generating Equipment

Presenter(s): Patrick J Danko, Jessica R Hanley, Lauren Williams
Advisor(s): Patrick K Williams
Biology - Senior/Capstone Project

Imagine a RecPlex where the energy you spend working out is transformed into electrical energy. Used not only to turn on the lights, but keep where you exercise cool. Advancing technologies in the modern world have made this a reality. Campuses all over the country are starting to incorporate this kind of equipment into their recreation centers. Machines that generate electricity and floors that transfer kinetic energy are two such examples. However, is this idea realistic? What would be the cost and the benefits if a RecPlex like ours were to be built with this technology? Our goal was to find out what students could do to improve the campus for a more Green influence.

Hershner Preserve Wetland Restoration

Presenter(s): Charles Chiara
Advisor(s): Jeffrey L Kavanaugh
Biology - Independent Research

In the summer of 2011, UD faculty and students began collection of reference data on plant communities in preparation for restoration of a wetland fen that had been heavily impacted by agricultural activity; portions of the site had been converted to pasture for cattle grazing.All together, the site is 26 acres and is located in Greene County, OH approximately 8 miles east of the University of Dayton. The unique natural area is a result of Wisconsinan glaciation and is part of a 15-mile long series of wetlands that were produced when the retreat of the glacier paused here 17-thousand years ago.Sections of the site have remained in pristine sedge meadow habitat. Our current study involves quantitative analysis of the plant community using a Vegetation Index of Biotic Integrity to determine reference conditions in less impacted areas of the site as well as the condition of the degraded areas. Metrics involved in the analysis include species richness, species diversity, the percent of invasives, and fidelity of species to preferred habitat. Our long term goal is to return the entire 26 acres to high quality habitat that includes sedge meadows, fens, and mesic prairies.

Hippo signaling controls Dronc activity to regulate organ size in Drosophila.

Presenter(s): Aidan Fenix, Shilpi Verghese
Advisor(s): Shimpi Bedi, Madhuri Kango-Singh
Biology - Graduate Research

The Hippo signaling pathway regulates organ size by simultaneously inhibiting cell proliferation and promoting apoptosis. The Hippo pathway is composed of a highly conserved core kinase cascade that is regulated by multiple upstream inputs and has multiple transcriptional outputs. Hippo signaling is required for cells to stop proliferation when organs have reached their proper size and hippo mutant animals produce severely overgrown structures. In contrast, over-expression of Hippo (or loss of yki) results in formation of smaller organs due to induction of apoptosis. Hippo pathway regulates apoptosis through its apoptotic target genes e.g., Hid, DIAP1 and the microRNA bantam. We found that cell death induced by Hippo over-expression cannot be rescued by co-expression of pan caspase inhibitor p35 or DIAP1. Hence, we investigated the role of Dronc in Hippo mediated cell death, as Dronc activity is resistant to p35 and not affected by changes in DIAP1 levels. We found that Hippo genetically interacts with Dronc and requires dronc to induce cell death. Our data suggests Hippo pathway can regulate cell death through the RHG proteins and via Dronc. Dronc along with its binding partner Dark can suppress the over-growth induced by over-expression of Yki, suggesting that normally Hippo pathway needs to restrict Dronc activity to maintain tissue homeostasis. Consistent with this idea, we found the Hippo pathway transcriptionally regulates dronc. Loss of dronc results in cell survival and dronc mutant cells proliferate faster than their wild-type twin spots. Here we present dronc (a gene required for cell competition and for caspase-mediated cell death) as a novel target of Hippo signaling.

Identifying cis-regulatory element changes that underlie gene expression and phenotypic evolution between species

Presenter(s): William A Rogers, Joseph R Salomone
Advisor(s): Thomas M Williams
Biology - Independent Research

Contributing substantially to the diversity of animal life on Earth are differences in regulatory DNA, particularly in cis-regulatory elements (CREs) that contain information about where, when, and to what level genes are expressed. The variation in abdominal pigmentation in fruit fly species provides a model to study both the evolution of CREs and the gene expression patterns they control. The bric-a-brac (bab) locus codes for the Bab1 and Bab2 proteins that are repressors of abdominal pigmentation development. In the species Drosophila melanogaster, pigmentation and Bab expression are sexually dimorphic due to the activity of a CRE called the dimorphic element. As abdominal pigmentation patterns vary between related species, our overarching hypothesis is that these phenotypic differences stem from changes in Bab expression via modifications to the dimorphic element. To test this hypothesis we are studying 4 related species with different abdominal pigmentation by evaluating for each their Bab1 and Bab2 expression and (2) testing the regulatory capability of their dimorphic element. Moreover, to understand how modern dimorphic element activities evolved we used a sequence comparisons and the parsimony principle to derive the ancestral dimorphic element sequences, which we have resurrected to evaluate their gene regulatory capability. Future studies will evaluate chimeric CREs of ancestral and extant dimorphic elements to find the mutations responsible for the evolved Bab expression patterns.

Induction of Chromatin Remodeling using Histone Deacetylase Inhibitors to Study Role of Oct4 in Notophthalmus viridescens (Newt) Eye Regeneration.

Presenter(s): Rital B Bhavsar
Advisor(s): Panagiotis A Tsonis
Biology - Graduate Research

Notophthalmus viridescens (Newts) are capable of regenerating many of its body parts and organs. They are the only salamander species that exhibit regeneration of lens during adulthood. The lost lens is regenerated by transdifferentiation of the pigmented epithelial cells to lens cells. This kind of cell type conversion is thus a natural potency of this organism. Whereas, in vitro cell type conversion studies are observed during direct reprogramming where one cell type is converted to another cell type using a cell type specific transcription factor along with histone deacetylase inhibitors. In this study, we proposed to compare the mechanisms of transdifferentiation during Newt lens differentiation and in vitro

reprogramming. In order to accomplish this, cultured newt iris pigmented epithelial (IPE) cells were treated with histone deacetylase inhibitor and transfected with oct-4 transcription factor. The cells treated with Trichostatin A (TSA) and oct-4failed to form aggregate and were not pursued further with in vivo studies. Whereas, the cells treated with TSA only did form lens after the in vivo implantation. Thus, TSA treatment alone did not have any effect on transdifferentiation capability of IPE cells to lens cells. Currently, an in vitro matrigel assay is being employed to perform the transdifferentiation study of oct-4 transfected IPE cells.

Influence of Abiotic Factors on Biofilm Succession in the Little Miami River

Presenter(s): Mary V Timko
Advisor(s): Mark E Benbow, Jennifer M Lang
Biology - Independent Research

Biofilm growth is a product of the environment with respect to both biotic and abiotic factors. In streams, epilithic biofilm succession typically results in a change in the proportions in community composition of bacteria, fungi, and algae. Due to the heterogeneous nature of stream communities, the overall growth of a microbial community is profoundly influenced by both physical and chemical factors of the environment. With a standard, healthy stream, manipulation of various physical factors can definitively serve as an indication of the effects on succession. To simulate epilithic biofilm growth, porcelain tiles were placed in the Little Miami River under varying conditions of light and flow. Tiles were placed at random locations along the stream continuum under regular light and flow conditions, treatments of increased turbulence, a dark treatment, and a combination of dark/turbulent flow. The study of biofilm succession took place during a four-week period and tiles were randomly assigned to be placed into the stream throughout the four weeks at intervals of 7, 14, 21, and 28 days. It was found that the treatments and days of growth significantly effected the biomass turnover, primary production, and biomass of the epilithic biofilms. The results indicate that abiotic factors influence development and succession of epilithic biofilms.

Influences of Disturbance Factors on Epilithic Biofilm Succession Throughout the Autumn Season: Stream Flow and Organic Matter Pulse Dynamics

Presenter(s): Will P Kmetz
Advisor(s): Mark E Benbow
Biology - Independent Research

Succession in epilithic biofilms has been studied extensively, however the effects of disturbance factors on succession remain unexplored. We studied the effects of large disturbances on epilithic biofilm succession in an Ohio stream over an 11 week period in which large disturbances and leaf fall took place. Over the course of the study ceramic tiles samples were collected weekly. Tiles were scraped to determine primary production, using chlorophyll a, and biomass turnover, using Ash Free Dry Mass (AFDM). Data indicate that temporal changes coincide with disturbance effects on primary production and biomass turnover. The intermediate disturbance hypothesis may explain the decrease in primary production and biomass turnover, despite the amplified levels of nutrients during the autumn season.

Isolation and characterization of peptides that interact with graphene

Presenter(s): Daniel P McCorry
Advisor(s): Sharon R Jones, Amit Singh, Rajesh Naik (WPAFB)
Biology - Independent Research

Graphene has recently been recognized as a promising nanomaterial for a variety of applications, such as in electronics and sensing. However, effective and controlled functionalization of this material has been limited to a few physicochemical methods. Peptides can selectively interact with specific nanomaterials and be used in controlled chemical reactions on the surfaces. Herein, we screen for peptides that bind to various graphene-based materials, including highly ordered pyrolytic graphite (HOPG) and chemical vapor deposited (CVD) graphene on copper foil using a combinatorial phage library. We also show binding characteristics of the peptide-binders on the surface of graphene using atomic force microscopy (AFM) and quartz crystal microbalance (QCM).

Lobe (L) interacts genetically with RD factors to promote ectopic eye formation in Drosophila melanogaster

Presenter(s):
Advisor(s): Madhuri Kango-Singh, Amit Singh
Biology - Independent Research

The Drosophila gene Lobe (L) is required for cell survival, Dorsoventral (DV) patterning, and eye development. L mutants cause loss-of-ventral eye phenotype due to induction of cell death and upregulation of Wingless (Wg). We investigated the role of L in eye development and specifically evaluate its ability to modulate the activity of the Retinal Determination Gene Network (RDGN). Specifically, we modulated L levels and assayed the effects on Ey, Eya, and So mediated ectopic eye induction using the UAS/GAL 4 misexpression system. Our results confirm that targeted expression of Ey induces ectopic eyes at a higher frequency. Among different Ey stocks tested for their ability to rescue the half eye phenotype of L2 mutation were full length Ey (UAS Ey#10 and UAS Ey#11) and others that had mutations in the phosphorylation sites in the CTD. UAS Ey Dala #2 is the most potent inducer of ectopic eyes. Furthermore, misexpression of eya or So result in the formation of smaller ectopic eyes at a lower frequency. The Eya protein levels remain unchanged in the bi;L2 >UAS Eya crosses suggesting that Eya is upstream of L. We hypothesized that if L genetically interacts with the key components of RDGN, co-expression of L with bi;GAL4> Ey, Eya, So, Eya+So would result in an expansion of eye field with tissue overgrowth in the eye-antennal disc. We also tested the requirement for L in inducing ectopic eyes by the key components of RDGN. We found that ectopic eyes are formed more robustly (increase in number and size) in the presence of L than in its absence.Misexpressing Eya, So, or both causes increased pharate lethality (>95%), distortion of compound eye at its margins, and partially rescues the loss of ventral eye phenotype of L2 mutant suggesting a genetic interaction.

PCL Nanofibers Induce Lens Fiber Formation of Mouse Lens Epithelial Cells

Presenter(s): Joelle Baddour
Advisor(s): Panagiotis A Tsonis
Biology - Graduate Research

Current cataractous lens replacement therapies require frequent medical checkups due to the potential formation of secondary cataracts as a result of the transdifferentiation of residual lens epithelial cells to mesenchymal myofibroblast cells (EMT). To prevent EMT, current treatments include laser therapy or the administration of anti-fibrotic drugs. Recently, Poly-epsilon-caprolactone (PCL) has become a popular material for tissue replacement therapy due to its relative durability compared to other biomaterials. For instance, the use of PCL as a nanofibrous scaffold offers a novel tool to model the complex architecture of different tissue types including skin, bone, cartilage, muscle, and brain cells. This study examines the suitability of PCL nanofibers for lens tissue engineering and lens replacement therapies. In an attempt to create a more organized lens fiber alignment without the risk of EMT, this study tests the use of aligned PCL nanofibers as a potential artificial lens matrix for cellular ingrowth and lens epithelial cells differentiation into lens fiber cells.

Re-establishing Native Flora in a Streamside Forest after Removal of the Invasive Shrub Amur Honeysuckle (Lonicera maackii)

Presenter(s): Eryn M Moore
Advisor(s): Rachel E Barker, Ryan W McEwan
Biology - Independent Research

Amur honeysuckle has invaded much of Midwestern Ohioâs stream side forests resulting in lower levels of native plant species. This has negative impacts on the health of our local ecosystems. Our experiment studied the effectiveness of native species plots in preventing re-invasion of Amur honeysuckle. In late summer of 2010, Amur honeysuckle was removed as part of a restoration experiment along a 150m long stream reach in Black Oak Park, Centerville, Ohio. In the spring of 2011, the four treatments applied to the removal stretch were control (no planting), shrub planting (pawpaw and spicebush), herb planting (herbaceous seed mix for stream banks), and both herbs and shrubs. Plant cover was measured in the fall of 2011, after a full growing season of establishment. Average percent coverage was measured in all plots for herb species and Amur honeysuckle. Results of the experiment show that the percentage and density of native plant species in all plot treatments, exceeded Amur honeysuckle and other non-native species. After replanting, mean vegetative cover was greatest in the mixed treatment of herb and shrub cover. Plots in which

only shrubs were planted had the lowest percent coverage. The total mean cover and number of native species at Black Oak Park were higher than invasive species. After honeysuckle removal, we did detect some new invasive species including the aggressive herbaceous plant garlic mustard; however, that was expected as garlic mustard tends to grow in areas following honeysuckle removal. Following removal, Amur honeysuckle regeneration in the plots was very low in comparison to other species. Most of the honeysuckle stems were from sprouts from cut stumps, and there were very few seedlings. From this study we have learned that Amur honeysuckle removal, and replanting native species in the removal area, can beneficially promote an increase in native plant species.

Regulating Proliferation and Differentiation of Notophthalmus viridescens' Immortal Cells in vivo

Presenter(s): Konstantinos Sousounis
Advisor(s): Panagiotis A Tsonis
Biology - Graduate Research

Notophthalmus viridescens, the red-spotted newt, shows astonishing regenerative capabilities. Part of the heart and brain, limbs, tail and eye tissues like the lens, are some of the organs that can be regenerated after removal. Studies show that newt tissues undergoing regeneration are resistant to cancer formation. This study was intended to investigate this linkage at the cellular level. Lens regeneration serves as a good model for this kind of study since lens is regenerated from the dorsal iris pigmented epithelial (IPE) cells and ventral iris can serve as a natural control. Primary goal was to create an immortalized IPE cell line. Iris pigmented epithelial cells (IPE) were isolated from the eye cup by surgery and enzymatic treatments. These cultured IPE cells were transfected with pSV3neo, a plasmid vector that expresses the simian virus 40 (SV40) Large T antigen. This protein is commonly used to immortalize cells that can create tumors. The transfected cells were selected with G418, a selective marker that pSV3neo has. Comparison between transfected and non-transfected cultured IPE cells revealed that these cells are resistant to the selective marker G418 in the concentrations that was tested even if they are not transfected. In addition, the IPE cells transdifferentiated to lens cells but they did not form lentoids as in cultured cells that G418 was not applied. The mechanism behind these initial observations is not known. Furthermore, using immunocytochemistry, it has been shown that SV40 Large T antigen positive cells are limited (<0.01%) and in combination to the fact that transfected cultured IPE cells with pSV3neo show to have more dead cells, it leads to a working hypothesis that the SV40 Large T antigen promotes apoptosis. In addition other vectors will be tried as well.

Role of defective proventriculus (dve) in Drosophila eye development.

Presenter(s): Oorvashi Roy G Puli, Erika L Wittkorn
Advisor(s): Amit Singh
Biology - Graduate Research

Drosophila melanogaster (a.k.a fruit fly) is a favored genetic model to study patterning and growth. We employ the Drosophila eye model to study axial patterning. Axial Patterning involves delineation of Antero-Posterior (AP), Dorso-Ventral (DV), and Proximo-Distal (PD) axes in the developing organ. Among the three developmental axes, DV axis is the first lineage restriction boundary formed during development of the eye as an organ. The Drosophila eye primordium begins from default ventral fate, on which the dorsal eye fate is established by expression of dorsal eye selectors like pannier (pnr). It has been suggested that there is a need to identify more genetic components involved in providing dorsal eye fate. Our lab has identified a new dorsal eye selector defective proventriculus (dve), which encodes a K50 homeodomain protein. We are characterizing the loss-of-function and gain-of-function phenotype of dve during eye development. Here I present my results from (1) loss-of-function studies of dve during eye imaginal disc development and adult eye development, (2) genetic interaction studies between dorsal selector pnr and our newly identified dorsal eye gene dve. These studies will help us understand the role of dve in eye development and its interaction with the other DV patterning gene pannier.

Role of retinal determination genes in amyloid beta 42 mediated neurodegeneration in the Drosophila retina

Presenter(s): Michael T Moran
Advisor(s): Madhuri Kango-Singh, Amit Singh
Biology - Independent Research

Michael T Moran, Meghana Tare, Oorvashi Roy Puli, Madhuri Kango-Singh and Amit SinghOne of the reasons for age related progressive neurodegenerative disorder, Alzheimer's disease (AD), is the generation of large aggregates of amyloid beta 42 that are toxic in nature. These amyloid beta 42 polypeptides which are hydrophobic in nature induce oxidative stress, aberrant signaling and many other cellular alterations that trigger neuronal cell death. However, the exact mechanisms leading to cell death are not clearly understood. We have developed a Drosophila eye model of AD where high levels of amyloid beta 42 are expressed in the Drosophila retina which results in induction of cell death. We are testing the role of core retinal determination (RD) gene machinery in amyloid beta 42 mediated neurodegeneration in the Drosophila eye. The core RD gene machinery include PAX-6 homolog eyeless (Ey), sine oculis (so), eyes absent (eya) and dacshund (dac). The results from these studies will be presented.

Role of signaling pathways in amyloid-Beta-dependent cell death in Drosophila eye

Presenter(s): Andrew M Steffensmeier
Advisor(s): Madhuri Kango-Singh, Amit Singh
Biology - Honors Thesis

Alzheimer's disease (AD) is an age-related, progressive neurodegenerative disorder. The reason for Alzheimer's neuropathology is the generation of large aggregates of amyloid-Beta 42 that are toxic in nature, and induce oxidative stress, aberrant signaling and many other cellular alterations that trigger neuronal cell death. However, the exact mechanisms leading to cell death are not clearly understood. We employ a Drosophila eye model of AD to study how amyloid-Beta 42 causes neurodegeneration. Misexpression of higher levels of amyloid-Beta 42 in the differentiating photoreceptors of the fly retina rapidly induced aberrant cellular phenotypes and cell death. We found that blocking Caspase-dependent cell death initially rescued cell death but did not lead to a significant rescue in the adult eye. However, blocking the levels of c-Jun NH (2)-terminal Kinase (JNK) signaling pathway significantly rescued the neurodegeneration phenotype of amyloid-Beta 42 misexpression both in the eye disc as well as the adult eye. Here we present our findings on the role of signaling pathways controlling patterning and growth in amyloid plaque mediated cell death observed in the Drosophila eye.

Scavenging Effects on Carrion Decomposition (SSI: Swine Scene Investigation)

Presenter(s): Alexandra E Calteaux, Lauren E Shewhart
Advisor(s): Mark E Benbow
Biology - Independent Research

The objective of the study was to observe the effects of vertebrate scavenging on aspects of carrion decomposition. Scavenging can influence the microbial and insect communities on a decomposing body. These communities have forensic applications that enable the determination of a post mortem interval to estimate the time of death of a corpse. In this study, six swine carcasses were placed on the edge of a forested lot in Farmersville, Ohio (latitude: 39.66597, longitude: -84.39951) on November 4, 2011. Three carcasses were excluded from scavenging by wire cages, and three were left uncovered. Motion sensor cameras were mounted near each exposed pig to capture scavenger activity at all times during the study. To understand how higher or lower temperatures may have been correlated with scavenging events, the average ambient temperature of days when scavenging occurred were compared to the average ambient temperature of days when no scavenging was observed. The preliminary data suggest a correlation between temperature and scavenging. As temperature increase, scavenging also increases. The information from this study can be used to better understand the effect of temperature on the frequency of scavenging events. This in turn can increase the accuracy of the determination of the post mortem interval.

Study of developmental interaction of chip and L during DV patterning of Drosophila eye

Presenter(s): Greg F Mancini, Katrina L Staker, Meghana Tare
Advisor(s): Amit Singh
Biology - Honors Thesis

Axial patterning is crucial for organogenesis to transform a single layer of cells into a three dimensional organ. Axial patterning involves generation of Dorsal (D) Ventral (V), Anterior (A) , Posterior (P), and Proximal (P) and Distal (D) axes. We are using the Drosophila melanogaster eye model to understand the mechanism of axis specification during organogenesis. The DV axis is the first axis established by function of a number of specific DV genes. Two important proteins, Lobe (L) and Serrate (Ser), are responsible for defining the ventral default state of the eye. A newly identified gene chip, a transcriptional co-factor, is involved in defining the boundary of ventral eye. Here I present the results from my study on developmental interaction of L and chip during DV development and patterning of eye. We are trying to understand if L interacts with chip during eye development in order to define the DV axes. Since genetic machinery is conserved from flies to humans, our studies will shed light onto the basic mechanism of axis specification during organogenesis.

Tapered Optical Fibers for Detection of Volatile Organic Compounds

Presenter(s): Branden J King
Advisor(s): Karolyn M Hansen, Peter E Powers
Biology - Graduate Research

Optical fibers have been used for detection of analytes in aqueous and vapor phases by assessing changing light transmission parameters resulting from biomolecular interactions occurring on fiber surfaces. The primary objective of this study is to refine the optical fiber design by tapering the fiber to modify the light path for enhanced detection of vapor phase analytes at very low concentrations, particularly volatile organic compounds (VOCs). The typical light path through a single mode fiber with cladding results in low loss of light from the fiber. Tapering the fiber removes the cladding, thins the diameter of the fiber core, and results in net loss of light from the core of the fiber. Lost light (photons) exists as a wave along the surface of the tapered fiber. Molecular binding events on the surface of the taper result in disruption of the light path which is measurable as a change in refraction/intensity.Single mode optical fibers have been tapered from 125 microns to 10-15 microns in diameter via heat treatment and pulling of fibers. Tapered regions serve as the sensing interface, such that the light propagating through/around the fiber can interact with molecules tethered to the surface. Tapered regions will be functionalized with biomolecules for capture/detection of analytes in both aqueous (antibody) and vapor phase (DNA, peptide recognition molecules). Interaction of recognition molecules with analytes will cause a change in the molecular structure at the tapered surface. We posit that these changes will affect light passing through the fiber and will result in a characteristic spectral fingerprint indicative of the analyte. Future work will focus on refinement of surface chemistry to maximize molecular interactions for detection of low concentrations of analytes. We envision the use of tapered optical fibers in array format for detection of multiple analytes in complex samples.

Temporal and Spatial Distribution of an Anuran Chytrid Fungus: Comparison of the Amphibians from Fragmented Forests in Hardin County, Ohio

Presenter(s): Lauren L Charbonneau
Advisor(s): Patrick K Williams
Biology - Honors Thesis

Chytridiomycosis disease, caused by the chytrid fungus Batrachochytrium dendrobatidis (Bd), has contributed to anuran population declines and extinctions worldwide. The disease is known from Africa, Asia, N. America, and Australia. In Ohio the geographic distribution of the fungus and the impact on amphibian species is unknown. The impact of this pathogen, however, varies markedly among amphibian species and populations. This project is focused on the detection of Bd in amphibian populations located in Lawrence Woods State Nature Preserve and fragmented forest woodlots in Hardin Country, Ohio. The project investigates the temporal change in infection by season and species. Comparison of populations within and between isolated populations will provide geospatial assessment of the distribution of the disease.

The bab Locus Model for Synergistic Gene Regulatory Interactions in Development and Evolution.

Presenter(s): Eric M Camino, Kaitlyn R Francis, Jordan E Vellky
Advisor(s): Thomas M Williams
Biology - Graduate Research

Complex spatial and temporal patterns of gene expression (production of a gene's encoded protein) are crucial to animal development and changes in expression patterns are a common mode of evolutionary innovation. Thus, understanding development requires answering: (1) what are the DNA elements, so called CREs, controlling expression, (2) how the DNA sequences of CREs encode gene regulatory capabilities, (3) whether and how CREs work together to make complex expression patterns, and (4) how CRE sequences identify their gene target(s) of regulation in a 3-dimensional nucleus? These answers will aid studies to reveal the mechanisms of gene expression, and thus animal, evolution. A model to address these questions is the bab locus of fruit flies. This locus contains the duplicate bab1 and bab2 genes that shape a derived pattern of pigmentation in the species Drosophila melanogaster. The relevant bab expression pattern is controlled by two CREs which we found to interact in a non-additive, or synergistic, way to yield this pattern. Ongoing studies seek to trace: when and how CRE synergism evolved, which CRE sequences encode their synergistic activity, how these CREs interact with the bab genes, and whether synergism is limited to these genes. Ultimately, this work aims to connect how animal form is programmed into 1-dimensional DNA sequence and how this program evolves.

The Effects of Silver Nanoparticles on Mouse Embryonic Cell Renewal and Cell Cycle

Presenter(s): Christopher J Stucke
Advisor(s): Yiling Hong
Biology - Honors Thesis

The use of silver nanoparticles in commercially made products is rapidly increasing, and there is no regulation on the disposal of these nanoparticles. As human exposure to silver nanoparticles rises, this study determines the effects of this exposure on stem cell factor gene expression and stem cell fate. This was accomplished by introducing varying concentrations of silver nanoparticles into mouse embryonic stem cells for varying amounts of time. Western blot and immunoprecipitation techniques were run on these cells to determine how the responses of stem cell factors Oct4, Nanog, P53, SirT1, and Rb differ from their normal function within the cell. In addition, this study also determines whether programmed cell death is occurring in response to the silver nanoparticle treatment. The results of the research provided necessary scientific data to improve or eliminate potential toxicity of nanoparticles, and information for relevant authority when approving products for consumer uses.

The mutations, molecular mechanisms, and constraints directing the evolution of a Drosophila cis-regulatory element

Presenter(s): William A Rogers, Joseph R Salomone, David J Tacy
Advisor(s): Thomas M Williams
Biology - Graduate Research

A major goal of evolutionary developmental biology research is to illuminate how evolution acts on development to cause phenotypic change. A wealth of data implicates changes in gene expression as the predominant means by which morphological traits evolve, and likely via mutations in cis-regulatory elements (CREs) that specify gene expression patterns. Each expression pattern is encoded in a CRE as a regulatory logic comprised of a collection and organization of binding sites for certain transcription factor (TF) proteins. While several case studies have identified instances of CRE evolution, how encoded regulatory logics evolve remains poorly understood. An intraspecific comparison of Drosophila melanogaster sexually dimorphic abdominal pigmentation patterns presents an opportune situation to reveal how regulatory logics evolve. The degree of female pigmentation varies between populations and this variation stems from genetic variation at the bric-a-brac (bab) locus, which encodes the Bab TF proteins that act as repressors of pigmentation development. Bab expression in females is controlled by a CRE known as the dimorphic element. We identified four dimorphic element alleles that possess different gene regulatory capabilities. By determining the sequence and function of the CRE possessed by the most recent common ancestor of these extant populations we were able demonstrate how few mutations were necessary and sufficient to alter the function of the derived alleles. Ongoing studies seek to reveal how these few mutations of a relatively large effect modify an ancestral regulatory logic.

The Role of Hemocytes in Shell Formation in the Eastern Oyster, Crassostrea virginica

Presenter(s): Cristina R Prall
Advisor(s): Karolyn M Hansen
Biology - Independent Research

The Eastern oyster, Crassostrea virginica, produces a tough, fracture-resistant protective composite shell that is composed of calcite (a polymorph of calcium carbonate) as well as organic material (proteins, glycoproteins). Scientists have examined the shell formation process in molluscs for many decades and have proposed two models for the shell formation process. The matrix-mediated model focuses on the role of proteins as nucleation sites for calcite crystal formation while the hemocyte-mediated model proposes the role of oyster blood cells for transport of calcite nuclei to the shell formation front. Specifically, the hemocyte-mediated model proposes that the hemocytes of C. virginica contain calcium carbonate crystals that are transported through the tissues and deposited at the shell formation front. These nuclei then grow and coalesce to form the typical layered organic-mineral shell structure. This study focused on determining if hemocytes were capable of producing mineral structure when cultured outside the organism. Hemocytes were collected from notched oysters and cultured for up to ninety six hours ex vivo in order to determine if crystal formation occurred. Microscopic analysis (scanning electron microscopy, SEM) of the hemocyte samples revealed crystal structures within and around cells cultured on glass substrates. The process of shell formation is very complex and probably involves both the matrix-mediated and hemocyte-mediated model for movement of both organic and mineral resources to the shell formation front. While elucidation of the basic biological process of shell formation is of great interest, there is potential for use of hemocyte crystal deposition for development of biomedical implant coatings. The biocompatible oyster-derived material may function as a better interface for integration of tissue with metallic implants.

Using Drosophila eye mutants to model defects in Microphthalmia or Anophthalmia

Presenter(s): Katelin E Hanes, Shilpi Verghese
Advisor(s): Madhuri Kango-Singh
Biology - Honors Thesis

Micropthalmia and anophthalmia are congenital birth defects, which result in severe growth defects in eyes resulting in small eyes or visual field. However, if these defects occur due to defective differentiation of cells under the regulation of eye-specific genes, or due to defects in the regulation of genes responsible for growth of the eye primordium and the production of uncommitted progenitor cells remains unknown. Drosophila melanogaster is a well-established model to study human diseases as genes involved in eye development exhibit structural and functional similarities from flies to humans. Eye development involves (a) growth of the eye field, and (b) the differentiation of the different cell types. Several genetic pathways, and signaling from Decapentaplagic (Dpp) and Hedgehog (Hh) is absolutely essential for the differentiation of photoreceptor cells in a field controlled by Eyeless (Ey). These pathways are conserved between flies and humans as are pathways regulating organ size. Our goal is to test if the Hippo pathway plays a role in the determination of final eye size. The Hippo pathway is responsible for generation of uncommitted precursor cells for organ development and size determination. Our objective is to test if changes in levels of Hippo signaling alter the phenotype of fly mutants that cause a reduction in eye size. Our initial data identified sine-oculis (so), a retinal determination gene, as a quantifiable model for our studies. However, soD is a dominant negative allele, therefore, we developed the tools to test the effect of Hippo signaling on a strong hypomorph of so [so1]. These studies will shed light on the role of uncommitted precursor cells in determining the size of the eye field, and contribute to our understanding of early eye development.

Visualizing Evolution through Differences in Gene Expression

Presenter(s): David J Tacy
Advisor(s): Thomas M Williams
Biology - Honors Thesis

Variations in when and where genes are expressed (that is where they make a protein) are suspected to be a major source for organismal evolution. Identifying which genes have undergone expression changes is a necessary prerequisite to understand how expression patterns evolve. Pigmentation trait differences between Drosophila fruit fly species remain a leading model to identify gene expression changes underlying trait evolution. This is due to the fact that many of the genes required to make pigments and those that specify where pigments are produced have been identified in the genetic model organism species Drosophila melanogaster. Two important regulators of pigmentation are the tandem du-

plicate genes bab1 and bab2 that encode the Bab1 and Bab2 transcription factor proteins. These proteins block pigment development as they repress the expression of genes needed for the pigment metabolic pathway. For Drosophila melanogaster, the dorsal cuticle covering the posterior abdominal segments of males, but not females, is fully pigmented. This sexual dimorphism stems from the absence of Bab1 and Bab2 expression from these segments in males. Interestingly though, females from different geographic populations vary in the extent of pigmentation ranging from a near total absence to a more male-like pattern. I hypothesized that differences in Bab1 and Bab2 expression would exist between females with different extents of abdominal pigmentation. For my thesis I have employed in situ hybridization and immunohistochemical methods to test this hypothesis through observations of the mRNA and protein products respectively. My results raise new questions regarding how the expression patterns of duplicate genes evolve.

Do Trends in Bacterial Replication Restart Pathways Depend on the Presence of Primosome Protein DnaT?

Presenter(s): Linda Berg
Advisor(s): Matthew E Lopper
Chemistry - Graduate Research

Throughout the life of a cell, the process of DNA replication is challenged by factors that can bring about damage to the DNA, which ultimately leads to a halt in DNA replication and, if not corrected, cell death. Bacteria solve this problem with a mechanism called DNA replication restart. DNA replication restart is catalyzed by primosome proteins which are well-studied in the model organism, E. coli. However, not all bacteria encode the full complement of primosome proteins, suggesting that differences might exist in DNA replication restart pathways among diverse bacteria. N. gonorrhoeae, for example, lacks a DnaT homolog, but DnaT is encoded by E. coli and is thought to affect interactions between primosome protein PriB and single-stranded DNA. This raises the question of how a bacterium might compensate for lack of a primosome protein, such as DnaT, that provides otherwise essential functions in some bacteria. Since N. gonorrhoeae PriB has a weak interaction with single-stranded DNA, as opposed to the strong interaction between PriB and single-stranded DNA in E. coli, we hypothesized that the presence of a DnaT homolog could be used to predict the affinity with which a bacterial PriB would bind single-stranded DNA. Binary interactions between PriB and single-stranded DNA of two bacteria, Klebsiella pneumoniae (which encodes a DnaT homolog) and Yersinia enterocolitica (which lacks a DnaT homolog) were analyzed. Both K. pneumoniae and Y. enterocolitica have a high affinity PriB:single-stranded DNA interaction with dissociation constants of ~62 nM and ~84 nM, respectively. Thus, the presence of DnaT cannot be used to predict affinities of binary interactions between PriB and single-stranded DNA. However, the experimentally measured binding constants combined with amino acid sequence alignments of the PriB homologs have led to the definition of parameters for high affinity binary interactions between PriB and single-stranded DNA.

Inhibition of the PriA and PriB Primosome Proteins of the Neisseria gonorrhoeae Replication Restart Pathway.

Presenter(s): Hayley E Ward
Advisor(s): Matthew E Lopper
Chemistry - Honors Thesis

DNA damage that occurs in bacterial cell DNA can lead to cell death by inhibiting the replication of genetic material. Bacteria, such as Neisseria gonorrhoeae, have developed a method to avoid cell death due to premature termination of DNA replication using a DNA replication restart pathway. Previous research has determined that there are two proteins, PriA and PriB, that play an important roll in the replication restart pathway. Collectively, these enzymes bind to the DNA and facilitate reloading of the replication machinery in order to initiate replication without an origin sequence. The proposed study will look for possible inhibitors to the function of PriA and PriB and will also explore the method through which these inhibitors function. These inhibitors could potentially be developed into novel antibiotics against N. gonorrhoeae.

Sorption Kinetics of Denatonium Benzoate to 2:1 Layered Aluminosilicates

Presenter(s): Emily J Sandmann
Advisor(s): Garry Crosson
Chemistry - Senior/Capstone Project

Denatonium Benzoate (DB), commercially known as Bitrex, is a denaturant added to many common commercial products, such as laundry detergent and antifreeze (in some states) to deter ingestion by humans and animals. The intensely bitter taste of DB is detectable by humans at aqueous concentrations as low as 50 ng/L while 10 - 30 mg/L concentrations can render drinking water unpalatable. Given the push by US lawmakers to mandate that DB be added to some commercial antifreeze formulations, it is imperative that potential environmental consequences associated with accidental releases of this material be investigated. Knowing if, and understanding how, sorption to soils and clays occurs can provide important information that can be used to (a) assess the potential of transport through the soil environment and (b) determine treatment strategies for bodies of water impacted by DB. Accordingly, the main objective of this study was to evaluate the kinetic parameters associated with denatonium sorption to clay minerals. Batch sorption experiments using 200 mg/L DB in 0.01M calcium chloride were run for three types of 2:1 layered aluminosilicates. High pressure liquid chromatography analyses were used to quantify absorption, the sorption kinetic rate constant, and the activation energy. The results suggest that denatonium sorption is a pseudo-second order process for each clay. Additionally, the activation energy (energy barrier to sorption) was determined for Syn-1 to be 25.89 kJ/mol from which we concluded that a physisorption process occurred. Finally, upon comparing the surface-area normalized sorption capacities (Qs) we determined that sorption was greatest for SWy-2 and least for Syn-1 based on calculated capacities of 1.54 x 10^-2 g DB/m^2 and 3.08 x 10^-4 g DB/m^2, respectively. Thus, a possible treatment method for water-impacted by DB could include SWy-2 clay as an absorbent.

Structural Studies and Coupling Reactions of Boronic Esters and Amides

Presenter(s): Andrew P Kuttler
Advisor(s): Vladimir A Benin
Chemistry - Senior/Capstone Project

As part of our investigation on flame retardant compounds, we recently prepared some new terephthalic esters and amides, containing a cyclic boronic ester moiety. This study focused primarily on the solid-state structure and reactivity of the target compounds. The structures of the boronic esters and amide were elucidated using X-ray crystallography and a rationale was advanced to account for the structural features, based on theoretical studies. The cyclic boronic ester was also utilized in the preparation of new aromatic and heteroaromatic structures, using the Suzuki coupling reaction. It involves the formation of a carbon-carbon bond between two functionalized aromatic systems, in the presence of palladium-containing catalyst.

Study of the mechanism of an inhibitor of DNA replication restart in Neisseria gonorrhoeae

Presenter(s): Bharath Sunchu
Advisor(s): Matthew E Lopper
Chemistry - Graduate Research

Neisseria gonorrhoeae is the causative organism of gonorrhea. This pathogen shows remarkable resistance to damaging oxidative agents that would be released by neutrophils in an infected individual. The bacterial genome is an important target of these agents, and studies indicate that the PriA-catalyzed DNA replication restart pathway helps in bypassing the hazardous effects of these oxidative agents. The DNA replication restart pathway facilitates reloading of the replication machinery onto the DNA when it has been derailed by obstructions such as nicks, double stranded DNA breaks, or oxidized bases. In N. gonorrhoeae, primosome proteins PriA and PriB carry out the DNA replication restart process by forming a nucleoprotein complex at a repaired DNA replication fork. PriA, which is a DNA helicase, binds and unwinds a portion of the duplex DNA with the help of PriB, and this facilitates reloading of the DNA replication machinery. Evidence that PriA provides resistance against oxidative damaging agents bolsters the importance of DNA replication restart for the survival of this disease-causing bacterium. Developing antibiotics that target this pathway could be vital in the field of drug discovery research. Therefore, we have developed an enzyme-based assay to use in high-throughput screening to identify inhibitors of the DNA replication restart pathway in N. gonorrhoeae. Initial screening of several thousand compounds from

small molecule chemical libraries has produced several lead compounds that inhibit PriA:PriB function in vitro. Here, we describe one of the lead compounds and explore the mechanism by which it inhibits primosome protein function.

Fixing The Frame: A Look at the Organizational Culture of Grassroots Organizations

Presenter(s): Andrew K Kelly
Advisor(s): Anna L Langhorne
Communication - Honors Thesis

An in-depth qualitative analysis of organizational culture was conducted of two non-profit, grassroots organizations that address poverty in the Dayton area. Shoes4TheShoeless was established two years ago and provides footwear to underprivileged children. Homefull was established more than 20 years ago and works to end poverty through advocacy, education and housing options for its clients. Interviews and on-site observations were completed at both organizations from November 2011 to January 2012. The structured interviews ranged in length from 25 minutes to more than an hour. The data was analyzed using a coding scheme and over-arching themes were analyzed. It was determined that organizational culture within grassroots organizations in Dayton shapes how the organizations operate and fulfill their service missions.

Applying Genetic Programming to Develop a Rubikâs Cube Solver

Presenter(s): Brian T Bradley
Advisor(s): Dale E Courte
Computer Science - Honors Thesis

Genetic programming, a method of developing code using evolutionary principles in a computer simulation, can theoretically be applied to any problem. This work explores the applicability of genetic programming to the generating a human-readable set of rules that could be used to solve the cube. This involved developing a language to describe solutions to the cube as a series of rules, an algorithm to process those rules, and a fitness function to describe how good a possible solution is. Because of the high dimensionality of the problem, the difficulty in creating a good fitness function, and the need to develop both good rules and good solutions simultaneously, the ultimate goal was not achieved. However, through the effort to apply genetic programming to develop a Rubikâs Cube solver, valuable information was gathered on what needs to be done for such an attempt to be successful.

Investigating and Improving Communication in the Center of International Program's (CIP) International Student and Scholar Services (ISSS)

Presenter(s): Sarah B Gajos, Annea Hapciu, Benjamin T Miller, Xinke Peng
Advisor(s): Amanda J Wright Cron
English - Course Project, 12_SP_ENG_372_01

In the changing organizational environment, Doheny-Farina (1986) emphasized that an organization's rhetoric shapes its members and affects the daily practices of that organization. The purpose of this research project is to assess the daily written communication techniques used in the Center of International Programs. This analysis includes observing staff, interviewing staff individually, and developing a full assessment of the writing patterns within the department. The overall goal is to analyze the type of communication used and the specific traits that form the basis of written communication in the Center of International Programs and find areas for improvement. Participants must be associated with the CIP in one of two ways: they are employed by CIP and/or they have used CIP as a student resource. To continue the International Students and Scholars Services will be researched to evaluate the specifics and rhetoric of their writing and then analyze the differences to everyday English. To fully understand specific areas of observation it is necessary to understand the purpose and reason a process is used. Once the processes associated with the International Students and Scholars Services are understood, areas where improvement can be made to simplify and better the writing processes will be focused on. By the end of the research, International Students and Scholars Services can see, both logically and supported by data, why recommendations for changes in their program hold merit.

9:00 AM to 10:30 AM

The Challenges, Frustrations, Triumphs and Terrors of Starting and Maintaining a Social Justice Club at UD.

Presenter(s): Lindsey M Callihan, Hillary A Cook, Kyle S Fischer, Patrick T Gannon, Morgan A Hale, Ryan D Hunn
Advisor(s): Lori G Phillips-Young, Margaret M Strain
English - Independent Research

The Social Justice Club is one of the University of Dayton's newest student organizations that was created with one goal in mind: How best to support the Social Justice LLC initiative. Starting a new service organization is truly an altruistic goal, but it comes with a lot more challenges than most students and administrators realize. Our greatest strength is supporting the importance of community service and civic engagement. This presentation will honestly discuss the challenges associated with maintaining membership and initiating leadership roles within an organization. We will openly examine the challenges, the stresses, and frankly, the potential for failure of a first-year organization. In the true spirit of perseverance and the Marianist model of Lead, Learn, and Serve, with a heavy emphasis on the learning aspect of our initiative, we will outline our new strategies for increasing membership, supporting and nurturing leadership, and maintaining the can-do attitude that makes us The Social Justice Club at UD.

The Empathetic Experience of Beauty

Presenter(s): Halle S Trapp
Advisor(s): Andrew Slade
English - Honors Thesis

What is it that makes something beautiful? Although the universality of this experience is obvious, most people do not realize the complexities and implications of beauty. Because beauty is not part of contemporary critical talk, and is actually denounced, Wendy Steiner attempts to bring the concept back as a producer of an empathetic relationship in Venus in Exile. She exemplifies how the recognition of beauty of women in art has become transformed into something perverse, ultimately resulting in the view of women as possessions and sex objects. The underlying catalyst for this fetishized image of women rests in Sigmund Freudâs attribution to the basis of religion: the Oceanic Feeling. In my thesis, I will utilize Charles Baudelaire's "Beauty" to demonstrate that this limitless and unbounded sensation destroys the experience and power of beauty to fabricate empathy.

Destination Dayton: Dayton Civic Scholar 2013 Cohort Capstone Project

Presenter(s): Kyle M Grabowski, Zachary S Hadaway, Briana M Hollis, Marina S Locasto, Katherine B Repic, Nicholette T Smith, Amy M Sullivan
Advisor(s): Richard T Ferguson, Suzette Pico, Donald A Vermillion
Fitz Center for Leadership in Community - Senior/Capstone Project

A program of the Fitz Center for Leadership in Community, the Dayton Civic Scholars gives students the opportunity to become civic leaders within the Dayton community. Over three years, Dayton Civic Scholars complete 360 hours of community engagement, academic course requirements, and a capstone project. Presented by the junior cohort of Dayton Civic Scholars, this session will discuss their capstone project, Destination Dayton. The mission of Destination Dayton is to organize and facilitate a series of events that occur in the city of Dayton (outside of the "UD bubble") in order to further research on the level of student civic engagement at the University of Dayton. We hope this research will help fellow student organizations understand the most effective practices around increasing student engagement in the city of Dayton. To gather data, the cohort is utilizing a variety of survey tools to assess the effectiveness of event marketing, reasons why students choose not to engage the city of Dayton, and what kinds of opportunities students prefer. A campus wide survey was conducted at the outset of the project to collect data. Students who participate in Destination Dayton events complete a pre and post-survey at each event. Finally, a follow up survey is sent to participants two weeks following each event to assess their continuing level of engagement. Two events have taken place thus far, a "Sweetheart Skate" at RiverScape Ice Rink, and an egg hunt service event at Cleveland Elementary School. This Friday, Destination Dayton will be taking students to a Dayton Dragons game, which will conclude the planned events for this semester. Next semester, Destination Dayton will be looking to disseminate the results of our research to other groups on campus. In effect, we hope this strengthens the relationship between our campus and the larger Dayton community.

The Transformation of The Wheels for Kids Organization from a First Year Engineering Design Project to a Year-Long Service Learning Project.

Presenter(s): Joseph R Radisek
Advisor(s): David A Herrelko, Joanne M Troha
Fitz Center for Leadership in Community - Independent Research

Wheels for Kids was started by Dr. Herrelko in 2001 as a service-learning project for the first year students of the New Engineers Program. The project consisted of students collecting bicycles from the Dayton area and fixing them. The students organized and ran all aspects, including how the bicycles were collected, how the class was to be trained in fixing bicycles, and the preparation for the Wheels for Kids Day. The day was the culmination of the class, where the fixed bicycles were distributed to the local youth while learning maintenance and safety lessons. Joe Radisek participated in the last year (2008) of the original Wheels for Kids design. Since 2008, students from the University of Dayton have continued on the spirit of the Wheels for Kids project. Today, with assistance from the School of Engineering and the Fitz Center, Wheels for Kids is a recognized service organization on campus. The club works year-round collecting bicycles from the Dayton area, fixing them, and distributing them to the local youth with safety and maintenance training at the Wheels for Kids Day. Joe Radisek has been a leader in Wheels for Kids throughout this transitional phase and currently holds the position of Vice-President in the organization. As Joe plans to graduate in May 2012, this presentation provides an opportunity for him to impart his wisdom and insight. This includes the first hand experiences from the past five years of Wheels for Kids projects.

Changes in Precipitation Regimes in the United States

Presenter(s): Thomas A Davis
Advisor(s): Shuang-Ye Wu
Geology - Senior/Capstone Project

This study aims to investigate how climate change has affected precipitation patterns in the US. Precipitation provides us with freshwater, the most vital resources for life; but it also brings damages from extreme storms and flooding. There are three major mechanisms of precipitation in the United States: (1) frontal storms dominate during colder months from late fall to early spring and generally last for longer periods of time; (2) convective storms or âpop-up thunderstormsâ are more common during late spring and summer, and typically bring more intense rainfall for shorter period of time, and (3) precipitation due to orographic lifting in mountainous regions. The objectives of this study are to establish (1) if precipitation regimes have changed in the United States in the past 60 years as a result of climate change, and (2) if changes in precipitation patterns are similar for different types of storms and (3) if changes in precipitation patterns are similar in different climate regions. For this purpose, we used hourly and daily precipitation data from 1900 through 2010 collected from National Climate Data Center and US Historical Climatology Network to look for trends in the frequency and intensity of storms of various durations, and examine the statistical significance of these trends. The investigation is conducted in GIS in order to examine spatial variations of such changes.

Overview of glacier velocity across Himalaya

Presenter(s): Anthony T Parkes
Advisor(s): Umesh K Haritashya
Geology - Senior/Capstone Project

Glaciers, in general, are highly sensitive to climate fluctuations making them important indicators of climate change. Overall, lack of data on this region is troubling for the amount of hydrological importance and climatic forecasts these glaciers hold. Therefore, this study aimed to measure glacier velocity on selected glaciers using cross-correlation techniques. One of the main problems with determining the amount of loss or perhaps gain in glacier mass is determining their velocity. The Himalayan glaciers are inaccessible in most areas and field measurements can be impossible, which creates a problem when determining the velocity of glaciers. Consequently, I generated velocity profiles of glaciers in the Nanga Parbat region of the western Himalaya using 2009 and 2010 ASTER satellite data. My glacier fluctuation study has shown oscillating behavior of these glaciers; however, our preliminary velocity result indicates high velocity on most of these glaciers. These results I produced are the first ever velocity profile generated for this region.

The French Revolution in Early American Historical Imagination

Presenter(s): Jordan E Taylor
Advisor(s): Michael S Carter
History - Honors Thesis

This work argues that there is a significant gap in historical scholarship concerning the reception of the French Revolution in the early American Republic. It briefly examines the course of this reception and then contextualizes it in terms of the historical imagination of Americans during the late 19th. Century. The paper presents three of the key elements forming this historical imagination. First, the figure of the American Revolution loomed large in providing a pattern for understanding republican revolution. Second, Biblical millennialism and whiggish patterns of thought led Americans to view the French Revolution as symptom of the teleological progress of humanity towards a preordained end of peace and prosperity. Finally, the âparanoid styleâ of the young nation led Americans to attribute nefarious intentions to their ideological opponents relative to the French Revolution. Examination of these ideological impulses reflects the complex process involved in the creation of an American national identity during the early Republic.

US Immigration: The Power Struggle Between the States and Federal Government

Presenter(s): Sariana L Garcia
Advisor(s): Juan C Santamarina
History - Honors Thesis

With this thesis I will evaluate how the topic of immigration is handled in the political forums in the United States. Immigration is a topic of interest to many, which raises controversy in differing opinions regarding how it should be addressed. I look into the authority given to the states and the federal government regarding immigration. In order to prove the federal authority over immigration I did a close study of the US Constitution and the sections where it refers to topics relevant to immigration, such as the Fourteenth Amendment, where it hints at assigning the federal government the authority to deal with immigration issues. I evaluate well-known cases in which the US Supreme Court has deemed stateâs immigration laws unconstitutional, forwarding this task to national laws passed by Congress. With this thesis I aim to provide reasons why the topic of immigration should be handled by the federal government, given its constitutional authority. I will make a case for national unanimity when making policy decisions regarding immigration.

A Synthesis of finite difference methods and the jump process arising in the pricing of Contingent Claim

Presenter(s): Dan Zhang
Advisor(s): Paul W Eloe
Mathematics - Graduate Research

It is demonstrated that approximation of the solution of the Black-Scholes partial differential equation by using a finite difference method is equivalent to approximating the diffusion process by a jump process and therefore the finite difference approximation is a type of numerical integration. In particular, we establish that the explicit finite difference approximation is equivalent to approximating to diffusion process by a jump process, initially introduced by Cox and Ross, while the implicit finite difference approximation amounts to approximating the diffusion process by a more general type of jump process. This work has been introduced by Brennan and Schwartz, The Journal of Financial and Quantitative Analysis, [13] (1978).

Case Studies: The Experiences of Gifted Females in Mathematics

Presenter(s): Danielle M Bott
Advisor(s): Shannon Olivia S Driskell
Mathematics - Honors Thesis

This study sought to discover what gifted female students felt and experienced in both high school and college mathematics classes and whether these feelings and experiences had an effect on their choice of college major(s) or career field(s). A researcher-designed survey was used to prompt the participants to reflect on their experiences and feelings. Through a qualitative analysis of the data few themes emerged, therefore, a

question-by-question analysis of each participants' responses was completed. Results indicate that most of the participants had good experiences in high school and college, in general, but their responses varied greatly in how they viewed those experiences.

Numerical Algorithm to Value American Call Option

Presenter(s): Junyao Zhang
Advisor(s): Paul W Eloe
Mathematics - Graduate Research

A numerical algorithm is developed to produce a numerical solution of a boundary value problem for the Black-Scholes partial differential equation on a certain region that includes a free boundary. In this algorithm, an artificial boundary is introduced and a method to find the free boundary is developed. This algorithm is introduced by H. Han and X.Wu, A Fast Numerical Method for the Black-Scholes Equation of American Option, SIAM J. Numer. Anal., 41 (2003), pp. 2081-2095.

Numerical Investigation into a Computational Approximation of Bifurcation Curves

Presenter(s): Joshua R Craven
Advisor(s): Muhammad Usman
Mathematics - Independent Research

In this project, I use computational tools to study the bifurcations in nonlinear oscillators. Matlab is first used to determine the slow flow phase portrait of each region and the characteristics of each critical point. Next, the parameters are discretized and for each set of values we find the locations of the real critical points and the eigenvalues of the Jacobian matrix. With this knowledge, we can approximate the bifurcation diagram. These results are compared with results from preexisting software.

Option pricing based on Regime-Switching Recombining Tree

Presenter(s): Tao Tian
Advisor(s): Paul W Eloe
Mathematics - Graduate Research

Our goal is to design an efficient Regime-Switching recombining tree (RS-tree) to calculate the option price based on the condition that the underlying stock price fits the regime-switching model. The RS-tree is efficient if it grows linearly as the time steps increases; as a result, we can use many more time steps to calculate the option price. Both European and American options will be calculated in this Regime-Switching model. The next step is to design the RS-tree to two regimes (here m=2), and use the Regime-Switch model to calculate the option price for both European and American option. Finally, we will compared the result with others method. II.MethodAt first, we extend the Cox, Ross and Rubinstein Tree for the Black-Scholes-Merton option pricing model. Then we employ the method developed by Liu to construct an efficient RS-tree for European and American options. We begin with a 2-regime model. For the Transfer probability based on the two regimes, we use the method from Yin and Zhang. We construct a RS-tree which grows linearly and accomplish this by a recombination of nodes at each time step. As a result, we adjust the up factor U in a reasonable way; also, it is necessary to match the local mean and variance calculated from the tree to that implied by the continuous regime-switching diffusion in order for the discrete tree approximation to converge to the continuous process as the time step h goes to zero. Upon successful development of the 2-regime algorithm, we shall extend the algorithm to m >2 regimes and extend the applications to exotic options in the future.

Road Travel Time Estimation with GPS Floating Car Data

Presenter(s): Jieai Zheng
Advisor(s): Ruihua Liu
Mathematics - Graduate Research

The objective of this research is to provide reliable estimation of urban roadway travel time in time for traffic managing departments and travelers based on floating car data. Travel time data collection and estimation is an important technology method to achieve the Intelligent Transportation Systems (ITS) information services. Poor-quality information leads mistrust and un-ease of traffic congestion. Thus the accuracy of travel time prediction must meet certain requirements. GPS floating car collection method accesses the data source by ordinary vehicles equipped with

positioning and wireless communication devices (such as taxis, buses, trucks, private cars, police cars, etc.), which provides more efficient, accurate and in-time data. There are two parts in my research: (1) The collection and pre-treatment for urban road travel time data with GPS floating cars, and (2) The estimation for travel time. I process and filter the data with the algorithm by clarifying abnormal fluctuations, losses, errors, and validation in the data set. As the similarities of the influence factors for travel time according to time periods and road sections, the mutation analysis is applied to divide the traffic flow data into traffic periods, such as rush hours, ordinary hours, and night hours. To predict short-term travel time, I employ BP neural network model based on local optimization. Travel time information reflects the state of underlying roadway traffic, predicts the duration of traffic congestion, and determines abnormal states. The estimated travel time in the next period on a certain road can be published to those who are in need. Also, pilots can choose the lower-traffic-flow roads regard the estimated travel time, which help shorten travel time and ease the congestion in rush hours.

Stability Analysis of a Model for In Vitro Inhibition of Cancer Cell Mutation

Presenter(s): Christopher G Yakopcic
Advisor(s): Muhammad Usman
Mathematics - Independent Research

Human homeostasis is the body's ability to physiologically regulate its inner environment to ensure its stability in response to changes in the outside environment. An inability to maintain homeostasis may lead to death or disease, which is caused by a condition known as homeostatic imbalance. Normal cells follow the homeostasis when they proliferate and cancer cells do not. This work describes a model consisting of three reaction-diffusion equations representing in vitro interaction between two drugs. One inhibits proliferation of cancerous cells, and the other destroys these cells. A stability analysis of the model is performed with and without diffusion applied to the model. MATLAB is used to perform the stability analysis of the model.

Assessing Growth of Grades Six Through Eight Ohio Music Students and the Effectiveness of their Teachers

Presenter(s): Melissa A Durst
Advisor(s): Linda A Hartley
Music - Graduate Research

Legislative mandates such as No Child Left Behind and Race to the Top have emphasized an educational paradigm shift- effective teaching is defined by demonstrating student growth within a content area. Data is gathered and analyzed yearly, and now the results can impact teacher evaluations, hiring decisions, or teacher dismissal processes. Standardized testing is one of the most common ways of assessing students. This gives a clear and coherent view of student growth over a specific period of time. There are numerous other means to assess student growth, however, and to achieve the most efficient and effective evaluation, multiple assessments should be considered. Evaluating teacher effectiveness can include classroom observations, portfolios, student surveys, classroom artifacts, and performances. Non-tested subjects, such as music, are also under the same requirements to measure student growth to measure teacher effectiveness. However, there is no national or even state-wide assessment that is currently recognized and accepted for measuring student growth. Music teachers are responsible for teaching âknowledgeâ- a belief or consensus of fact; and âskillsâ- the aptitude for performing a specific task.This thesis specifically examines the following questions:1.How should the growth of music students in grades six through eight in the state of Ohio be effectively assessed?; and2.How should the effectiveness of grades six through eight music teachers in the state of Ohio be determined?Utilizing multiple, standards-based assessments, such as portfolios, performances, observations, and pretest/posttest models, student growth can be effectively and efficiently measured for students in the state of Ohio in grades six through eight. Teacher assessments in the state of Ohio should include evidence of a teacherâs capacity to plan lessons, establish a healthy learning environment, utilize best teaching practices, and create and maintain opportunities for professional growth.

Edison After School Music Program: A Field Experience Volunteering With Inner City Youth

Presenter(s): Stephanie M Jabre, Kristin A Mullen-Muhr
Advisor(s): Linda A Hartley
Music - Independent Research

This two year long field experience examines the challenges and successes of leading a brand new after school music program in an urban environment. Our work addresses the importance of creating a curriculum, applying for grants, and securing university volunteers in order to sustain the program. Our project also describes how we have addressed the problems that have arisen throughout the program, including recruitment and consistent attendance of participants.

Music Therapy and Evolving Sense of Hope Among At-Risk Adolescent Boys: A Qualitative Group Case Study Based on Yalom's Principles of Group Psychotherapy

Presenter(s): Jacklyn P Neforos, Joy M Willenbrink
Advisor(s): Susan C Gardstrom
Music - Independent Research

The evolution of group music therapy with at-risk adolescent young men will be described using Yalom's Stages of Group Development and Therapeutic Factors in the form of a group case study (Yalom, 2005). The young men participating in music therapy were residents of a home for young men ages 14-19 with behavioral, emotional, and mental health issues. Following an agreement with the University of Dayton, a music therapy practicum site was established, and music therapy groups were held twice weekly.A key influence throughout treatment was the role of group dynamics as a healing force. The music therapists recognized the presence of Yalom's Therapeutic Factors of group psychotherapy as meaningful analytical tools. These factors, recurrent during treatment, included universality, instillation of hope, cohesiveness, and catharsis, among others. Goals included development of self-efficacy, increased sense of hope, and increased self awareness and expression. Client input was utilized in establishing goals and structuring session experiences. These experiences included song composition, instrumental improvisation, instrumental re-creation, song communication, and song discussion (Bruscia, 1998).Clinical manifestations of Yalom's Therapeutic Factors will be shared through narrative and anecdotal examples. Session vignettes will further illustrate the treatment process, changing group dynamics, and the group reactions to various treatment methods and techniques. Professional growth and development of student music therapists will be described as a component of the treatment process. The intent of this case study is to provide a meaningful example of various treatment approaches and perspectives when working with young men from compromised backgrounds with emotional, behavioral and mental health issues, as well as encourage music therapy as a treatment modality in similar settings.Bruscia, K. E. (1998). Defining Music Therapy: 2nd Edition. Gilsum, NH: Barcelona Publishers.Yalom, I. D. (2005). The Theory and Practice of Group Psychotherapy: 5th Edition. New York: Basic Books.

Epitaxial Graphene on SiC

Presenter(s): Thaddeus J Asel
Advisor(s): Said Elhamri
Physics - Independent Research

The goal of this project is to understand the mechanism of graphene formation on SiC (000-1) face (C-face) through temperature dependent growth and comparing it to the formation of graphene on SiC (0001) face (Si-face). For that reason, several material characterization methods were used. These include magneto-transport measurements, Raman spectroscopy,and atomic force microscopy.

Project Glasswall: A Better University User Interface

Presenter(s): Elliott M Mazur
Advisor(s): Peter E Powers
Physics - Independent Research

Universities nationwide are always in search of a better way to match current and prospective students with research opportunities. However, the typical user interface implemented in university advertisement is not as user-friendly as may have been intended. In creating a new interface, we are attempting to simplify all the wonderful ideas set in place by previous applications, without the bulky, time consuming, and confusing setups

of these prior applications.Project Glasswall will reinvent the way students interact with university research resources. In order to see the project to its full potential, a proof-of-concept is the key aim, as most background programming necessary for the project is beyond common understanding, and misses the concept behind Glasswall. The project is designed in a way to allow the user to see into a building (the "research department") as if its walls were made of glass. By looking in on these labs, the user can explore the labs; this breaks down into information on the lab staff, useful literature on the research topic, a synopsis of the research conducted in the lab, projections of any animations related to the research, and certain types of equipment used in the course of the research.Project Glasswall has the capability to inform current and prospective students of the research opportunities available to them within the university. In addition, Project Glasswall will promote collaboration both within a given university and with affiliate universities. A user interface such as this could change how we understand university-student interaction, and could improve said communication.

Anxious Attachment, Silencing the Self, and Relationship Satisfaction

Presenter(s): Torrie L Caufield, Angela M Evanko
Advisor(s): Lee J Dixon
Psychology - Independent Research

To our knowledge, there has not been any research regarding the relationship between anxious attachment, silencing of the self, and relationship satisfaction. Over the years numerous studies have conducted experiments regarding anxious attachment and relationship satisfaction. Several have indicated anxious attachment is responsible for low felt security, which occurs when these individuals are insecure about losing acceptance from their partner (Joel, Macdonald, & Shimotomai 2011; Shaver, Schachner, & Mikulincer, 2005; Tucker & Anders, 1999). In fact, as a product of their high anxiety levels, anxiously attached individuals are more prone to emotional highs and lows, which can predict greater conflict severity and relationship dissatisfaction (Campbell, Simpson, Boldry, & Kashy, 2005). These characteristics of anxiously attached individuals can lead to silencing the self, the expectation of failure or rejection in a romantic relationship. In order to maintain a relationship without arguments, individuals have been found to stop expressing and forgetting their feelings of dissatisfaction (Whiffen, Foot, & Thompson, 2007). Individuals can strive to create stability in their relationship resulting in silencing of the self, which actually produces negative effects on relationship satisfaction (Jack & Dill, 1992). Based on the findings of the above-mentioned research, we predicted that silencing of the self would mediate the relationship between anxious attachment and relationship satisfaction. Participants (N=209; M= 110, F= 99) completed self-report questionnaires that measure silencing the self, insecure attachment, and relationship satisfaction. Results confirmed our hypothesis: silencing the self was found to mediate the relationship between level of insecure attachment and relationship satisfaction. Specifically, higher levels of insecure attachment were predictive of higher levels of silencing of the self, which, in turn, were predictive of lower levels of relationship satisfaction. Limitations, future directions, and implications of the study will be discussed.

Decoupling the Biomechanics of Locomotion and the Direction of Spatial Updating During Blind-walking Tasks

Presenter(s): Natalie L Anderson, Adam Barnas, Ryan N Fuentes, Kevin Longacre, Natalya N Lynn, Katherine Y Peters, Nicole A Schlater, Jeremy T Schwob, Adam D Sitz
Advisor(s): Benjamin R Kunz
Psychology - Independent Research

Spatial updating, or the process of keeping track of the locations of objects relative to one's spatial position while moving, is critical to a variety of navigation tasks. Although updating is likely to occur automatically during sighted walking, walking without vision requires imagined updating of the spatial relationships that change concurrently with movement. In particular, dynamic spatial updating likely underlies accurate performance when blind-walking to previously seen targets, a task commonly-used to assess distance perception (Rieser et al., 1990). Studies of imagined walking suggest that the biomechanical information from locomotion influences the accuracy of spatial updating and blind-walking (Kunz et al., 2009). We further investigated the role of biomechanical information in spatial updating by manipulating the biomechanics of locomotion and the direction of spatial updating during blind-walking. In Experiment 1, participants viewed targets that were positioned directly in front or behind them. Participants were instructed to walk without vision to the targets while spatially updating their positions in the environment as they walked either forward to targets in front of them or backwards to targets behind them. Participants were generally accurate in both forward and backward walking, suggesting that participants spatially update in a manner consistent with their direction of movement, even for backwards

locomotion. In Experiment 2, participants viewed targets that were positioned directly in front of them and either walked forward while spatially updating to where they believed the targets were located or matched the distance between them and the target by walking backward without spatially updating. Experiment 3 decoupled the biomechanics of walking and the direction of spatial updating. Participants viewed targets positioned directly in front of them and either walked forward without vision to the targets while spatially updating or walked backward from the targets while spatially updating in a manner consistent with forward walking.

Do Autonomous Individuals Strive for Self-Positivity? A Test of the Universal Nature of Self-Enhancement

Presenter(s): Bridget P Lynch
Advisor(s): Erin O'Mara
Psychology - Graduate Research

This research explores the relationship between self-enhancement motivation (i.e., the motive to have and maintain positive feelings about the self) and autonomy (i.e., the motive to feel in charge of one's own life). Extensive research has shown that all people are motivated to feel positively about the self. However, a small set of studies have noted that people who feel in charge of their lives and decisions (i.e., high in autonomy) do not appear to meet the need to feel good about the self in the same way as their peers. In Study 1, 150 participants completed a series of self-report measures to assess recently identified self-enhancement strategies and levels of autonomy. Study 1 will identify which types of self-enhancement are consistent with varying levels of autonomy. Using the results from Study 1, Study 2 will experimentally examine the relationship between self-enhancement and levels of autonomy by manipulating the type of self-enhancement task that 150 participants will engage in. After the manipulation participants' well-being will be measured. Data from both studies will be analyzed using multiple regression. It is expected that people will have greater psychological well-being when they self-enhance in a way consistent with their levels of autonomy. This research will either provide support for the universality of self-enhancement by identifying the strategy autonomous individuals use to self-enhance or may contradict the idea that everyone is motivated to meet the need to feel good about the self.

Evaluations of Aesthetics of Faces in Portraits and Photographs

Presenter(s): Adam Barnas, Daniel A Hurlburt, Kaitlin E Key
Advisor(s): Susan T Davis
Psychology - Independent Research

When viewing a painting, "a person has an aesthetic experience that consists of visual scrutiny of interesting pictorial features detected initially to satisfy cognitive curiosity and to develop aesthetic appreciation of the display" (Locher et. al, 2006). The present study evaluates aesthetic preferences for faces, specifically relating to those influenced by art. Portraits and photographs of faces are matched for variables such as gender, artistic medium, ethnicity, face shape, facial hair, hair color, eye color, and facial position (full or profile) and then shown to participants, individually in separate conditions and then simultaneously in another condition. Data will be collected using self-report ratings and an eye tracker, which is a device that measures eye positions and movements while a participant is viewing the painting and/or photograph. Our hypothesis is that the faces in portraits will be rated higher for pleasingness than faces in the photographs because of the greater aesthetic appreciation and consequent value associated with art (Locher et al., 2006). Further, we expect that data from the eye tracker will be consistent with these ratings and will show that eye scanning movements will focus on features of the portraits that determine the aesthetic value of the paintings and more time will be spent in eye fixations on these features than in similar features of the photographs. This research has implications for marketing and product development, as well as significance for our understanding of what makes art "art."

Internet risk awareness as a mediator for the relationship between age and privacy settings on Facebook

Presenter(s): Anna J Scott
Advisor(s): Melissa J Layman-Guadalupe, Carolyn R Phelps
Psychology - Honors Thesis

Facebook's increasing popularity among college students has caused new issues regarding privacy on a website whose major aim is to foster communication via personal information sharing. However, this is not consistent across all ages. In fact, research has shown that as a person's age

increases, the amount of information they share on the internet generally decreases. A new direction in research is to understand why, which was the aim of this study. Sixty undergraduate students were given a validated questionnaire which investigated how concerned each individual is regarding their safety and privacy on the internet. This information was compared to each person's Facebook privacy settings which were recorded during the study, followed by an analysis of these results.

Measuring Spatial Intelligence and Memory for Location in Athletes

Presenter(s): Ashley M Adamcik, Adam Barnas, Catherine E Devlin, Eric M Gammarino, Laura A Janosko, Giuseppe G Miranda
Advisor(s): Susan T Davis
Psychology - Independent Research

The question for this research is whether athletes, particularly those who compete on the intercollegiate level, have spatial abilities and better memory for location than non-athletes. The present experiment tested memory for location using stimuli consisting of a target presented among varying numbers of distracters (other target-like objects). In a second display for each trial, the target had moved. For each trial, participants remembered either the beginning or ending location of the target. We hypothesized that memory performance would decrease with an increase in the number of distracters. On the other hand, a landmark (such as a black stationary oval in the center of the display) would improve memory performance. We expected that the landmark would facilitate memory for the location of the target before and after movement by providing a reference for the application of mental spatial coordinates. We also expected that athletes would perform better on tasks of spatial intelligence due to their practice with understanding objects in a spatial layout, such as a football field or a basketball court. Preliminary analyses support these expectations although everyday memory, such as memory span, appears to be the same for athletes and non-athletes.

Multimodal Evaluation of Resource Allocation in a Comprehension Task

Presenter(s): Adam D Sitz
Advisor(s): Susan T Davis
Psychology - Honors Thesis

Understanding how mental resources are utilized for different tasks is crucial for optimizing performance and avoiding error. To this end, psychologists have identified several key dimensions that can be used to distinguish multiple mental resources. Such dimensions include, among others, the type of information presented in a task and the manner with which information is presented. The present experiment evaluated participant performance in the context of a single comprehension task comprised of two components each of which was matched with a distinct modality across conditions. One task component required participants to respond to critical signal phrases (example: Eagle 1 Hostile North Lead Group 43 Miles) as they were presented in a continuously updating list of neutral signal phrases (example: Viper 2 Contact North Trail Group 50 Miles). The other task component required participants to comprehend and retain news articles as they were presented over time. For every condition, each component was presented in one of two modalities, audio or text, such that all four possible combinations of task component (information type) and modality (manner of presentation) were examined. Evaluated together, the detection of critical signal phrases and retention of news article content (measured by means of a multiple-choice questionnaire) determined total task performance. My hypothesis predicted that the two combinations featuring incongruent (non-matching) presentation modalities would show better performance over the two congruent (matching) combinations of presentation modalities because of the shared use of multiple mental resources when the modalities were different. However, results indicate that in addition to cross modality interaction, the interaction between modality and task component was another necessary factor in predicting task performance. For example, because the task in this experiment requires comprehension of the written word, the longer information access time provided by the text modality has an advantage over the temporally limited audio modality.

Parental Sensitivity to Child Anxiety Problems: An Examination of Child, Family, and Demographic Influences

Presenter(s): Jeannette M Iskander
Advisor(s): Jackson A Goodnight
Psychology - Graduate Research

The present study examined family, child, and demographic influences on parents' decisions to carry out efforts to reduce their child's anxiety problems. The current study analyzed data from 363 families who participated in the Child Development Project (Dodge, Bates, & Pettit, 1990), a longitudinal study of social development. When children were 11 years old, parents were asked whether they had become concerned enough about their child's anxiety in the last two years to begin an active campaign to help their child. Unadaptable (inhibited) child temperament, socioeconomic status, family stress, child gender, ethnicity, and mother-rated anxiety/depression from the Child Behavior Checklist served as predictors of parents' decision to mount a campaign. Predictors were measured at least one year before parents reported on their concerns about their children'Âs anxiety. Results from logistic regression analyses revealed that high levels of stress and unadaptability in infancy, as well as low SES were all associated with an increased probability that a mother would start a campaign to reduce her child's anxiety problems. However, once the effect of child anxiety/depression on mother's concern was statistically controlled, none of these variables were significantly associated with mothers' campaign efforts. Moderating effects of the child and family variables on the association between child anxiety/depression levels and mothers' decision to mount a campaign were also examined. Child gender was the only variable found to increase parental sensitivity to child anxiety/depression. The association between child anxiety/depression and mothers' concerns/campaigns efforts was stronger for girls than for boys. The results of this study suggest that child and family influences (e.g., stress, SES) on parents'decisions to respond to child anxiety may be explained by differences in child anxiety levels. In addition, the findings indicate that parents are more sensitive to levels of anxiety and depression in their daughters than in their sons.

Performance and Assessment of Accuracy in a Visual Sustained Attention Task

Presenter(s): Steven A Bare, Adam Barnas, Brittany L Bernard, Nnimnoabasi E Essien, Christian L Sutphin
Advisor(s): Susan T Davis
Psychology - Independent Research

Vigilance, or sustained attention, typically requires observers to monitor for infrequent critical signals over extended periods of time (Warm, 2003). Critical signals are presented differently than the more frequent neutral signals that we experience in perception and are typically indications of impending danger that demand attention. Past research has proposed that the decline in vigilance as an attention task continues for some time and is caused by mindlessness, or withdrawal of attention from the monitoring task (Robertson et al., 1997). The present research investigates the ability to detect changes in visual stimuli. Participants will be presented with sets of stimuli containing four arrows facing the same clockwise or counter-clockwise direction in a circle. Participants will respond when a set has one arrow facing the opposite direction from the other three. In addition, participants will be queried about their confidence in the accuracy of their detections. Our expectation is consistent with the typical decline in attention over monitoring time; that is, confidence will also diminish as the vigilance task continues. The results of the present study can be applied to any situation requiring sustained monitoring of informational displays. For example, pilots and technicians are required to monitor streams of visual and auditory stimuli for prolonged periods of time where the consequence of not detecting a critical signal could be catastrophic. Understanding more about vigilance processes can help avoid disaster.

Predictors of Cell-phone Driving: A Theory of Planned Behavior Approach

Presenter(s): Ming Yue Chan
Advisor(s): Keri J Kirschman
Psychology - Honors Thesis

Research has shown that motor vehicle crashes are one of the main factors for pediatric unintentional injuries, which is the leading cause of death for children beyond the age of one in the United States. It has been proposed that due to technological developments, wireless devices such as cellular phones have become a serious distraction for drivers. This is because engaging in a conversation on a cellular phone is a cognitive distraction that takes away resources needed to process visual and auditory information from the road. Research has also shown that a driver's field of vision

narrows when using the cellular phone. Further, it has been shown that drivers experience the same degree of impairment whether using hand-held or hands-free devices. As such, prevention efforts to reduce the risks of motor vehicle collisions are greatly urged. This study aims to explore, based on the Theory of Planned Behavior, which is the strongest predictor of cellular phone driving in a population of parents.

Privacy in Public: Personality and Eriksonian Theory as Applied to College Students' Facebook Disclosure

Presenter(s): Claudia E Clark
Advisor(s): Melissa J Layman-Guadalupe, Carolyn R Phelps
Psychology - Honors Thesis

In recent years, Facebook has become an internet phenomenon. This has resulted in widespread use and various levels of disclosure. Previous research has found that personality affects the amount and types of disclosure on users' profiles, especially the traits of extroversion (a continuum of energy from others or energy from self) and neuroticism (a continuum of anxiety and control-orientation vs. calmness and less emphasis on control). Although research is fairly extensive on these traits and their effects on Facebook, it is conflicting. In addition, Erikson's theory of psycho-social development states that a person reaches specific life crises at different stages and must solve these in order to live successfully. Studies have found that level of psychosocial development affects disclosure on one's Facebook profile, but this research is scarce. This study will focus on the crises of "Âidentity vs. role confusion," in which a person must understand himself, and "intimacy vs. isolation," in which a person connects with or retracts from others. This thesis aims to find how the factors of personality and development specifically affect disclosure on Facebook profiles of undergraduate college students. Participants were students enrolled in a psychology course. They took a questionnaire regarding Facebook use, and they also filled out four validated surveys, each measuring one of the four factors of focus in this study: extroversion, neuroticism, identity, and intimacy. The results of these surveys will be compared to the "information" section, last "status update," and profile picture of each participant. I believe that this study is important in understanding this age group and by creating a better awareness of self in order to exercise greater caution when posting information on Facebook.

Recovery from Mental Illness: Further Development of a Measure of Recovery Constructs

Presenter(s): Jonathan Hentz
Advisor(s): Roger N Reeb
Psychology - Graduate Research

The primary objective of this study is to develop a theory-driven, empirically-based, brief psychometric instrument to assess recovery from mental illness. Participants will include approximately 100 adult clients from a local community mental health agency at various levels of recovery from mental illness. Clients will be asked to complete several self-report instruments which have been slightly revised to allow consistent formatting between instruments. Based on the results of a preliminary study (Hintze, 2009), twenty-one of the most representative items from instruments measuring the following constructs were selected to constitute the recovery psychometric battery: hope, purpose or meaning in life, coping self-efficacy, empowerment, and self-esteem. In addition, participants will complete the following psychosocial criterion measures that assess real-life functioning: A well-validated, brief measure of recovery will help mental health professionals to (a) quickly assess and understand the clientâs level of progress in recovery and (b) identify specific factors (i.e., hope, purpose in life, or agentic control) that need to be targeted in order to augment and promote recovery.

The Effect of Context Upon the Perception of Egocentric Distance Using a Walkable Human Muller-Lyer Illusion

Presenter(s): Natalie L Anderson, Adam Barnas, Ryan N Fuentes, Kevin Longacre, Natalya N Lynn, Katherine Y Peters, Nicole A Schlater, Jeremy T Schwob, Adam D Sitz
Advisor(s): Benjamin R Kunz
Psychology - Independent Research

The Muller-Lyer illusion is a well-known geometric illusion in which pairs of lines of the same length are perceived to be different because of forms (e.g. "fins") at the ends of the lines. This influence of context upon the perception of line length is well-established for 2-D illusions but has also been demonstrated in larger-scale, three-dimensional spatial tasks (Wraga, Creem and Proffitt, 2000). Across three experiments, we utilized a

large-scale, walkable variation of the Muller-Lyer illusion to examine the effect of context upon the perception of egocentric distances. Whereas the traditional Muller-Lyer illusion utilizes geometric forms at the end of lines to manipulate the context of the line, we employed human forms to manipulate context. In each experiment, participants viewed a human target facing either towards or away from them and were then asked to judge the distance to the target. We predicted that the facing direction of the human target would influence magnitude estimates of target distance, similar to the way geometric forms at the ends of lines influence judgments of line length. However, we also predicted that action-based indicators of perceived distance (e.g. walking to the previously-viewed target person with eyes closed) would not be influenced by the contextual information provided by the human target's facing direction. In Experiments 1 and 2, participants viewed human targets that were facing toward or away and then, with eyes closed, walked a distance that matched the perceived distance to the target person. Results from these experiments suggest that action-based indicators of perceived distance are immune to contextual influences of human target facing direction. In Experiment 3, participants will view human targets that are either facing toward or away, but will verbally estimate the distance to the target. Together, these results will speak to the role of contextual information in spatial perception.

The Effect of the Parent-Adolescent Emotional Context on the Link between Positive Parenting Practices and Adolescent Behavioral Adjustment

Presenter(s): Joseph G Molitor
Advisor(s): Jackson A Goodnight
Psychology - Graduate Research

Parenting practices can be analyzed according to two components: parenting practices and the parent-child emotional climate, according to Darling and Steinberg. In this theoretical framework, parenting practices and the emotional climate are independent dimensions of parenting processes, and the impact of parenting practices on child behavioral outcomes depends on the emotional climate. Research indicates that positive parenting practices and a warm parent-child emotional climate predict low levels of child antisocial behavior, but the effect of positive parenting on antisocial behavior at different levels of the parent-child emotional climate has not been investigated. This study examines the moderating effect of the parent-adolescent emotional climate on the association between positive parenting practices and conduct problems. The proposed study seeks to investigate the following three hypotheses: (1) Parental warmth will be inversely related to adolescent externalizing behavior, controlling for initial levels of externalizing behavior and positive parenting practices. (2) Positive parenting practices will be inversely related to adolescent externalizing behavior, controlling for initial levels of externalizing behavior and parental warmth. (3) Parental warmth will moderate the effect of positive parenting practices on adolescent externalizing behavior, controlling for initial levels of externalizing behavior and the independent main effects of parental warmth and positive parenting practices on externalizing behavior. Specifically, the inverse association between positive parenting practices and adolescent externalizing behavior is expected to be stronger at high levels of parental warmth than at low levels of parental warmth. Hierarchical regression analyses will be used to test the main and interactive effects of age 14 emotional climate and positive parenting practices on age 16 externalizing behavior, controlling for age 14 externalizing behavior.

The Effect of Thin-Ideal Media on Body Image:An Experiment Using the Solomon Four-Group Design

Presenter(s): Sara E Mason, Nyssa L Snow
Advisor(s): Roger N Reeb
Psychology - Graduate Research

The purpose of this study is to examine the effect of thin-ideal media on body image in college age women. The discrepancy between the ideal presented in the media and the reality for most individuals is thought to be a significant source of body dissatisfaction. Exposure to thin-ideal media may have negative effects on women's body image, but there are contradictory findings in existing literature. The discrepant findings in research on body image may be due to inconsistencies across studies regarding which body image dimension is assessed. Discrepancies may also be due to a failure to control for the pretest sensitization effects of body image assessment. This research addresses these methodological problems and elaborates on existing literature. A better understanding of the ways in which thin-ideal media influences the different dimensions of body image will guide and inform the development of interventions designed to prevent body image problems and eating disorder tendencies.

The Effects of Social Support on Adjustment to College

Presenter(s): Paul T Enlow
Advisor(s): Jackson A Goodnight
Psychology - Honors Thesis

The transition to college is a new and exciting time in a studentâs life. However, it may also become increasingly stressful due to rapid changes, new experiences, and added responsibilities. Friendship has been found to influence how well a student adjusts to college life, but the influences of individual aspects of friendship are not well understood. This study examined the effects of friendship on college adjustment as indicated by overall satisfaction and academic achievement. Results showed that experiencing more social support and acceptance was associated with better academic adjustment. In addition, it was found that overall adjustment is associated with factors such as amount of acceptance, academic performance in school, the degree to which one is connected to home, and how much social support is provided by friends.

The impact of self-esteem level on the interpretation of ambiguous stimuli after a rejection experience

Presenter(s): Nicholette T Smith
Advisor(s): Erin O'Mara
Psychology - Honors Thesis

How do rejection experiences influence the interpretation of messages in people with high self-esteem versus people with low self-esteem? Previous research finds that ambiguous or neutral information will be encoded according to one's mood, a phenomenon referred to as the mood congruent encoding hypothesis (Schwarz & Clore, 2006). The present study examines whether self-esteem buffers against the negative effects that a negative mood stemming from a rejection experience has on the interpretation of emotionally neutral, written information. It is hypothesized that people with low self-esteem who have experienced a rejection experience will interpret a neutral message and the sender more negatively, and as more threatening than individuals with high self-esteem. This hypothesis will be tested in two steps. At Time 1, participants will complete baseline measures of the Rosenberg Self-Esteem Scale (Rosenberg, 1965), the Rejection Sensitivity Questionnaire (Downey & Feldman, 1996), and the Narcissistic Personality Inventory (Raskin & Terry, 1988) during the psychology department's mass testing session. At Time 2, participants will come to the lab and be randomly assigned to write about one of three things: a past experience of rejection (high rejection condition), acceptance (low rejection condition), or an event unrelated to rejection or acceptance (control condition). Participants will then read an emotionally positive, negative, and neutral piece of text, ostensibly written by another person, and evaluate whether they perceive the written text to be emotionally positive or negative, as well as describe their perceptions of the writer. Data will be analyzed to see whether there is a significant difference in interpretation of the neutral stimulus after undergoing a rejection experience, based on one's self-esteem level. Identifying connections between self-esteem and rejection sensitivity is important in determining under which circumstances individuals carry rejection experiences into other aspects of life to predict and explain interpersonal interactions.

The Mediating Effects of Rumination on the Relationship between Perfectionism and Self-forgiveness

Presenter(s): Katherine A Earl
Advisor(s): Lee J Dixon
Psychology - Honors Thesis

Self-forgiveness has been defined as a set of motivational changes whereby one becomes decreasingly motivated to retaliate against the self, and increasingly motivated to act benevolently toward the selfâ (Fincham & Hall, 2005, 622). Studies by Heinze & Snyder (2001) as well as Mauger et al. (1992) suggest that essential to the relationship between psychological well-being and forgiveness is the concept of forgiveness of self. Self-forgiveness has been linked to rumination, a maladaptive coping response to stressful occasions in which one focuses on his or her distress and on possible reasons for as well as the ramifications of the distress (Thompson, Snyder, Hoffman, Rasmussen, Billings, Heinze, Shorey, Roberts, 2005; Nolen-Hoeksema, 1991). Also related to the study of self-forgiveness is the study of perfectionism or âa desire to be perfect, a fear of imperfection, and an emotional conviction that perfection might be the route to personal acceptabilityâ (Greenspon, 2008, p. 280). According to Besser, Flett, and Hewitt (2004), perfectionism is correlated with the ruminative response style classified by Nolen-Hoeksema (1991). Though there is a

wealth of research regarding the associations between forgiveness and rumination as well as perfectionism and rumination, all three concepts of self-forgiveness, rumination, and perfectionism have never been studied in conjunction before. Given past research, I hypothesize that rumination mediates the relationship between perfectionism and self-forgiveness. More specifically, I predict that increased levels of perfectionism will be associated with increased levels of rumination, which, in turn, will result in decreased levels of self-forgiveness.

The Relationship between Narcissism, Overconfidence and Risky Behavior

Presenter(s): Arianna T Arnett, Adam Barnas, Megan K Dailey, Jamie L Flannery, Kristen A Kemp, Peter M Sismour
Advisor(s): Susan T Davis
Psychology - Independent Research

Previous research has shown that overconfidence, the belief that ability to perform a task is greater than actual ability, is associated with risky behavior (Campbell, Goodie, & Foster, 2004). The present research evaluated the relationship between overconfidence, risky behavior, and narcissism (confidence and feelings of self-sufficiency, often in the extreme). Male and female undergraduate participants were given a series of questionnaires and participated in several tasks to assess overconfidence, narcissism, risky behavior and the need for achievement. Participants were assigned to either an experimental condition, where participants bet on their ability to answer a series of general knowledge questions, or a control condition, where participants rated their confidence in their ability to answer the same series of general knowledge questions. To examine whether feedback had an effect on confidence, participants either received or did not receive feedback after answering each general knowledge question. We hypothesized that those who merely rated their confidence would show less signs of overconfidence than those who bet on the accuracy of their performance. Results have shown that the participants that were placed in the betting condition were notably more overconfident than those who were only asked to rate their confidence. We also predicted that narcissism would correlate with risky behavior in participants. Those who scored higher on a narcissism scale were also more likely to engage in risky behavior.

The Role of Visual and Proprioceptive Limb Information in Object Size and Affordance Judgments

Presenter(s): Adam Barnas, Adam D Sitz
Advisor(s): Benjamin R Kunz
Psychology - Independent Research

In the mirror illusion, visual information from a mirror reflection of one hand influences the perceived location of the other hand. Holmes, Crozier, and Spence (2004) demonstrated this visual capture effect on a spatial localization task in which visual information was found to influence reaching movements towards a target when the seen (in the mirror) and felt (proprioception) position of the hand did not match. In this present experiment, the conflict between vision and proprioception was examined by means of a task in which participants adjusted the physical distance between their two hands to match targets of different lengths. In each trial, participants viewed their visible hand and its reflection in a mirror, while their unseen hand was positioned at one of four locations located behind the mirror. At all times, the visible hand was positioned fourteen cm in front of the mirror, and as such, the unseen hand always appeared to be twenty-eight cm from the visible hand regardless of its actual position. While viewing their visible hand and its reflection, participants performed simultaneous finger movements with both hands to maximize the illusion. Participants then viewed a target block and repositioned their unseen hand such that the distance between their hands matched the block length. Results suggest that movement of the unseen hand relative to the visible hand was biased by visual information from the mirror, and this bias increased as the visual-proprioceptive conflict increased. These results suggest that the visual information about hand position overrode the proprioceptive information when the hands were used to indicate perceived object length. Additional experiments will use affordance judgments to further investigate how visual and proprioceptive information affect judgments of limb location and action capabilities.

The Use of A Mental Rotation Task to Assess Narcissism and Gender Biases

Presenter(s): Adam Barnas, Dana S Lynch, Joshua D Moran, Cara M O'Grady
Advisor(s): Susan T Davis
Psychology - Independent Research

This study evaluates levels of overconfidence with a series of mental imagery tasks while assessing various participant characteristics such as narcissism, or excessive self-admiration of one's own physical or mental capabilities. Participants where assigned to an experimental condition in which they received a bias concerning gender stereotypes, stating that men were superior to women in performing certain spatial tasks while women were more adept than men in completing verbal tasks. Participants in a control condition received instructions necessary to complete the tasks and similar to those given in the experimental condition; however, there was no mention of gender stereotypes. During the experiment, letters (F, L, and R) appeared on a computer screen either in a correct formation, as if typed in a word, or an incorrect formation as a mirror image of the correct formation. The letters were also presented at different rotated positions, such as upright, sideways, or upside down. After each image appeared, participants reported whether the letters were mirror images or in the correct formation, regardless of the rotation. Participants then gave an indication of their confidence in accurately identifying the presented formation of the letter. We predict that men in the experimental condition will express higher levels of confidence because of perceived superiority influenced by the stereotype information as compared to confidence expressed by men in the control condition. We further predict that women in the experimental condition will express lower levels of confidence because of perceived inferiority influenced by the stereotype information as compared to confidence expressed by women in the control condition. The expected results of this study will demonstrate a relationship between perceived gender biases and overconfidence and at least a temporary reduction in narcissism that may prevail in many learning environments, such as schools and universities.

Understanding Posttraumatic Stress Disorder among Victims of Intimate Partner Violence: The Roles of Perceived Social Support, Self-esteem, and Self-blame

Presenter(s): Avery H Ozimek, Rusty P Schnellinger, Laura E Stayton, Anne L Steel
Advisor(s): Catherine L Zois
Psychology - Graduate Research

The relationship between the experience of intimate partner violence (IPV) and the development of Posttraumatic Stress Disorder (PTSD) has been well established in the literature (Basile, Arias, Desai, & Thompson, 2004). However, researchers have called for more complex statistical models capable of identifying and analyzing the pathways potentially linking IPV and PTSD. Research indicates that IPV victims report lower levels of perceived social support than non-IPV victims (Bengtsson-Tops & Tops, 2007) and that as a result, victims are at greater risk of developing PTSD (Ozer, Best, Lipsey, & Weiss, 2008). The current study analyzed the moderating or "buffering" role of perceived social support in the relationship between IPV and PTSD. It was hypothesized that the relationship between IPV and PTSD would be stronger among individuals perceiving lower social support. In addition, it was hypothesized that the relationship between PTSD and the interaction of IPV and perceived social support would be accounted for by the mediating roles of characterological self-blame and self-esteem. The hypotheses were tested by distributing questionnaires to 132 adult female participants recruited at a substance abuse treatment facility and a private university. The results indicated that both IPV and perceived social support predicted PTSD, and perceived social support moderated the relationship between IPV and PTSD. At the extreme levels of perceived social support, the relationship between IPV and PTSD was weaker among individuals perceiving high levels of social support than among those perceiving low levels of social support. However, at the moderate levels of perceived social support, the relationship between IPV and PTSD was stronger among individuals perceiving high levels of social support than among those perceiving low levels of social support. Lastly, the results showed that self-esteem mediated the relationship between PTSD and the IPV x Perceived Social Support interaction variable.

Visual Distance Cues Used for Relative Distance Judgments in 2D Displays

Presenter(s): Laura A Janosko
Advisor(s): Benjamin R Kunz
Psychology - Honors Thesis

Recent evidence suggests that the quality of graphics in a computer-generated virtual environment influences the accuracy of distance judgments made within the virtual environment. This experiment investigates the suggestion that missing or incomplete surface texture and shadow

information in low quality computer graphics may account for inaccurate distance judgments. Participants will view a static, computer-generated desktop surface with between 5 to 8 everyday objects arranged on the virtual desktop. Each participant will complete two conditions: a high-quality condition, in which the virtual objects will include realistic texture and shadow information, and a low-quality condition, in which the objects have incorrect texture information and no shadows. On each trial, participants will make judgments about the distances between two objects in the display. We predict that distance judgments will be more accurate in the high-quality condition. An eye tracker will be used to determine which pictorial depth visual cues participants rely on when making distance judgments. We hypothesize that participants will use visible shadows, when available, to judge spatial layout and the distances between objects. Results will provide information about the influence of distance cues such as texture and shadows in the perception of spatial layout in 2 dimensional computer-generated images.

Banning the Burqa: France and the specter of Colonialism

Presenter(s): Sarah F Edwards
Advisor(s): Simanti Dasgupta
Sociology, Anthropology and Social Work - Honors Thesis

French society drastically changed in April 2011 with the implementation of 'Law of the Uncovered Face.' This law prohibits any article of clothing, religious or no, from covering the face, excluding safety and sporting equipment. The Muslim population of France is the religious group most affected, spurring many discussions about underlying motives for passing this legislation. Most of the Muslims in France today emigrated from former colonies of the French empire. This particular research looks at this relationship in a modern context, and examines what remaining colonial ties could exist within French society by comparing it with past legislation, legislative behaviors in France, what gendered implications exist and the colonial relationships that ended in the late 1900s.

Socioeconomic Status Impacts on Learning and Development

Presenter(s): Jasmine C Henderson
Advisor(s): Leslie H Picca
Sociology, Anthropology and Social Work - Independent Research

Abstract: This research project seeks to explore how social constructs such as social class and economic position impacts the development and learning process in early childhood, specifically between the ages of three to eight when an important biological phenomenon called synaptic explosion and synaptic pruning takes place. Past research findings suggest that there is a correlation between learning and developmental problems and economic status which reflects resources afforded to children. These social resources due to class position have been found to have a large impact on the biological development of children, which in return affects their capacity to learn.

Support Networks for Mothers in University Faculty

Presenter(s): Megan Hils
Advisor(s): Rebecca S Whisnant
Women and Gender Studies Program - Independent Research

An important part of motherhood is having a network of support. For women in university faculty, this is especially important but also especially challenging due to the nature of their work and the general circumstances of working in a field dominated by men. Through firsthand accounts of mothers in faculty positions at the University of Dayton, this paper explores the experiences of mothers and the importance of establishing a support network in raising a family and succeeding in their careers. Through these experiences, opportunities to improve the circumstances for mothers in a university faculty setting and to provide them support can be examined.

SCHOOL OF BUSINESS ADMINISTRATION

The IASB Presentation of Items of Other Comprehensive Income: an Analysis of Comment Letters

Presenter(s): Katherine E Seager
Advisor(s): Donna L Street
Accounting - Honors Thesis

The American Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) are working together to converge their accounting standards. The Boards have jointly undertaken the Financial Statement Presentation Project to standardize the presentation of financial statements, using constituent feedback to guide their efforts. This thesis analyzes how the Boards use the feedback from different parties to shape their standard setting in the area of Other Comprehensive Income. Comment letters were received by the Boards in response to the publication of proposed changes to standards. The thesis looks at these comment letters and analyzes the apparent impact of responses received on the final accepted amendments to the rules.

ROA and ROE as Determinants of Quality in Portfolio Management

Presenter(s): Joseph J Capka
Advisor(s): Robert D Dean, John E Rapp
Davis Center for Portfolio Management - Honors Thesis

Does Quality Matter? Since 1956, Standard & Poorâs has offered a rating system that differentiates stocks by quality, known as its Quality Rankings. From S&P's perspective, quality is a function of the growth and stability of earnings and dividends over time. While a number of past studies have concluded that stocks with a high quality ranking tend to outperform the market, some studies have identified variability among rankings, which suggests that a more complete set of ranking criteria is needed. In my study, I have tested the hypothesis that both Return on Equity (ROE) and Return on Assets (ROA), when considered as criteria for portfolio construction, generate additional performance above the S&P 500. Through an analysis of hypothetical portfolios of quality-ranked stocks, I have concluded that both ROE and ROA are additional determinants of quality and hence portfolio performance.

A Linear Probability Model of the Likelihood of Positive Returns for the S&P 500 Sectors, 2005-2001

Presenter(s): Brandon M Capicotto, Ryan D Hunn
Advisor(s): Robert D Dean, John E Rapp
Economics and Finance - Independent Research

The purpose of this study is to determine the odds or probability that an S&P 500 sector will have positive returns when the market has positive returns. Using monthly data for the ten S&P 500 sectors and the S&P 500, a linear probability model was developed for three time periods: (1) the complete 2005-2010 period, (2) the market downswing period, 12-31-07 to 3-31-09 and (3) the market upswing period, 3-31-09 to 12-31-10. For each of the periods we also calculated the average positive return for each sector. Using 2011 as the forecasting period based on the number of months of positive returns for the S&P 500 in 2011, we estimate the number of positive returns and the average expected return for each sector. Because 2011 has very distinct upswing and downswing periods, we develop our forecast estimate for these periods using the probability outcomes for the upswing and downswing periods sited above. The estimates are then matched against actual results in 2011. Results are forthcoming.

An Analysis of Excess Stock Returns and Fat Tail Distributions for Flyer Fund Stocks in the Volatile Market Period of 2007 - 2011

Presenter(s): George S Cressy, Conor Flynn, Corey R Pryor
Advisor(s): Robert D Dean, John E Rapp
Economics and Finance - Independent Research

Using twenty stocks from the Flyer Fund with equal representations for all ten S&P 500 sectors, an analysis was made to determine whether stocks had positive or negative excess returns over the period 2007-2010. Excess kurtosis (EK), a statistical measure for fat tail distributions was then calculated for the 20 stocks based on the excess return data. Using each stock's EK as the independent variable and 2011 stock returns as the dependent variable a cross sectional regression will be run to measure the impact of EK on stock price change. Results are forth coming.

An analysis of idiosyncratic risk and flyer fund performance in thr highly volatile market period 2007-2011

Presenter(s): Michael L Hermes, Erica M Kleinman, Kevin P Schrik
Advisor(s): Robert D Dean, John E Rapp
Economics and Finance - Independent Research

The purpose of this study is to determine for a select group of Flyer Fund stocks (20 stocks) the impact of idiosyncratic risk on stock performance using regression analysis. Monthly stock returns are regressed on S&P 500 market returns for the period 2007-2010. The standard deviation of the residuals are a proxy for idiosyncratic risk and can be used to forecast future stock returns. A cross sectional regression analysis using 2011 stock returns as the dependent variable and idiosyncratic risk and beta as the independent variables was run for the 20 stocks. The results indicate that both idiosyncratic risk and beta contribute meaningfully as predictors of stock performance in 2011.

An Analysis of Risk Adjusted Returns for Flyer Fund Stocks Over the Period 2007-2011

Presenter(s): Anthony Caruso, Samuel B Girouard
Advisor(s): Robert D Dean, John E Rapp
Economics and Finance - Independent Research

Most financial analysis now use risk adjusted returns to measure stock and portfolio performance. In the study we use 3 risk adjusted methods to measure performance: (1) Sharpe Ratio (2) Modigliani Ratio and (3) Information Ratio. All three methods focus on risk adjusted excess returns or alpha. Using monthly data the above ratios were calculated for 20 Flyer Fund Stocks over the period 20007-2010. Using cross sectional regression analysis each ratio both separately and combined will be regressed on 2011 stock returns to determine their contribution to price performance.

An Analysis of the Returns to High Quality Mega Cap Stocks in Volatile Markets: 2008-2011 as a Case Study

Presenter(s): Linh D Pham
Advisor(s): Robert D Dean, John E Rapp
Economics and Finance - Independent Research

The purposes of this study is to examine the impact on high quality mega cap stocks of four factors: (1) Profitability, (2) Financial Leverage, (3) Liquidity and (4) Operating Efficiency. The period of analysis is 2008-2011, a highly volatile period in the market. Annual returns for mega cap stocks are calculated for the period 2008-2011. Metrics for the above 4 factors are also calculated for the same period. Cross-sectional regressions are run by year with returns as the dependent variable and profitability, leverage, liquidity and operating efficiency the independent variables. Results are forthcoming.

Do Dividends Matter: An empirical analysis of the impact of dividends on portfolio stock selection, portfolio weights, and portfolio returns for S&P 500 stocks over the period 2005-2010

Presenter(s): Gregory J Castell
Advisor(s): Robert D Dean, John E Rapp
Economics and Finance - Honors Thesis

Because of a growing number of dividend-focused portfolios today, the critical issue is whether or not these types of portfolios create alpha. Therefore, the purpose of this study is to determine if a portfolio of stocks focused on dividends can create alpha (i.e. excess returns) in both declining and rising stock markets. Holding constant such key factors as valuation, earnings growth, and profitability, at the margin, I have assumed the critical dividend factors in determining alpha are dividend yield, dividend growth, and dividend payout ratio. To test the hypothesis that one or a combination of the above dividend factors can contribute to a portfolio's alpha, I will develop a "baseline" portfolio that has these general parameters: [1] the stocks in the portfolio will have Price to Earnings Ratios below the market, [2] their expected growth rate in earnings is greater than the market, and [3] the return on common equity will be higher than the market. The stocks in the baseline portfolio will then be weighted respectively by their dividend yield, dividend growth rate, and dividend payout ratio for the periods 2005-2010, allowing for yearly rebalancing. The portfolio returns will be compared to the S&P 500 market returns over the same time periods to determine if alpha was created. I will also calculate information ratios for the various dividend portfolios to determine risk-adjusted excess returns.

Identifying Portfolio Investment Strategies for High Quality Ranked Stocks in the Highly Volatile Market Period 2008-2011

Presenter(s): Mary H Viertel
Advisor(s): Robert D Dean, John E Rapp
Economics and Finance - Independent Research

In highly volatile market periods, many investors tend to reduce their risk by purchasing large cap, higher quality stocks. The purpose of this study, controlling for firm size, is to evaluate different portfolio weighting strategies based on valuation, operating efficiency, and profitability. For this study, the analysis is on very large cap stocks called mega cap stocks. Returns for this size group will be first determined based on market cap weightings. These returns will be considered the benchmarks against which all other returns will be measured. Within each size group, portfolio weightings will also be constructed based on valuation, operating efficiency, and profitability measures. The particular metrics, in sequence, are price to book, operating margins, and return on assets. Returns for each year and for the complete period will be calculated for each of these weighting strategies and compared to the returns for the benchmark portfolio, as well as the S&P 500. Results of the analysis are forthcoming.

Identifying upside and downside performance potential for Flyer Fund Stocks in the high volatile market period, 2007-2011.

Presenter(s): Catherine G Camerota, Jacob A Recker, Kelsey E Stroble
Advisor(s): Robert D Dean, John E Rapp
Economics and Finance - Independent Research

The purposer of this study is to determine if historical measures of upside and downside capture ratios can be used to determine the future performance of Flyer Fund stocks. Monthly upside and downside capture ratios were calculated for 20 Flyer Fund stocks over the period 2007-2012. Using cross sectional regression analysis, the returns for the 20 stocks in 2011 were regressed on the average upside and downside capture ratios for each stock calculated over the 07-10 period. The results indicate that a combination upside/downside capture ratio is useful in predicting shortterm stock performance.

Idiosyncratic Risk, Beta and S&P 500 Sector Performance in The Market Period 2005-2011

Presenter(s): Mark F Kocoloski, Joseph D Nitting
Advisor(s): Robert D Dean, John E Rapp
Economics and Finance - Independent Research

The purpose of this study is to examine the impact of sector idiosyncratic risk and beta on sector performance in three market periods: (1) overall period, 2005-2011, (2) the downswing period, 1-1-08 to 3-31-09, and (3) the upswing period, 3-31-09 to 12-31-10. Monthly data will be used to calculate beta and idiosyncratic risk. A time series regression for each sector, with the return of the sector as the dependent variable and the return to the market as the independent variable, is used to calculate sector betas. Then the error terms or the residuals are used to calculate idiosyncratic risk. Using 2011 as an out-of-sample time period, the annual returns to the 10 sectors are regressed on the long term betas and idiosyncratic risk. Because 2011 has very definitive upswing and downswing periods, the returns for these sub-periods are regressed on the upswing and downswing measures for beta and idiosyncratic risk. The results are forthcoming.

Idiosyncratic Risks in Different Regimes and The Cross-section of Expected Stock Returns

Presenter(s): Ziqi Qiao
Advisor(s): Rong-Chin C Chen
Economics and Finance - Graduate Research

Grounded in a behavior finance argument, I reexamine the relation between idiosyncratic risks and the cross-section of expected stock returns by taking regime shifts into consideration. I find that there are significant regime shifts over a long time horizon and that regime shifts do influence the relation between idiosyncratic risks and cross-section of expected stock returns.

Macro Economic Trends And S&P 500 Sector Returns 2002-2011

Presenter(s): Adeline M Bodart, Rachel J Kilbury, Catherine M Moerman
Advisor(s): Robert D Dean, John E Rapp
Economics and Finance - Independent Research

The purpose of this study is to determine if S&P 500 sector prices and revenues are correlated with growth trends in the U.S. Gross Domestic Products(GDP). Using quarterly sector price and GDP data, regressions are run for each sector over the period 2002-2011. Sector prices are the dependent variable and nominal GDP the indepentent variable. Using-out-sample 2011 quarterly GDP data, sector prices are forecasted for each quarter in 2011.A second approach called for 1)a regression of GDP on sector revenues and 2)a regression of sector revenues on sector prices. These regressions were carried out for 2002-2010. Using-the-out of sample quarterly GDP data for 2011, revenues forecasts were made for each sector and, in turn, the revenues estimates were used to forecast sector price changes. Results are forth coming.

Minor League Baseball from 1998-2011: Tradition, Success and the Recession

Presenter(s): Jacob L Rosen
Advisor(s): Tony S Caporale
Economics and Finance - Honors Thesis

Minor league baseball is a tradition unlike any other in the United States. But how have dozens of new stadiums, franchise relocations, the recent recession and more affected attendance numbers? Does over-saturation occur in specific metropolitan areas or states? What does the 'honeymoon effect' of new stadiums look like for minor league teams? And what is the ideal region to plant a bourgeoning minor league franchise?This thesis looks at three groups of case studies from nine different visits with dozens of interviews conducted by the author. Using economic testing, it then explores the connections behind what makes minor league baseball a roaring success in areas like Dayton, Ohio, but a faltering product in areas like Scranton, Pa. In combining the recent history of the sport with the fine-tuned marketing and branding of the 21st century, this thesis looks to see how minor league baseball keeps getting stronger.

Non Domestic Revenue Trends and Stock Performance for Flyer Fund Stocks 2005-2011

Presenter(s): AJ P Ziegler
Advisor(s): Robert D Dean, John E Rapp
Economics and Finance - Independent Research

Increasingly, American companies are turning to overseas markets to grow top line revenue and bottom line earnings. The purpose of this study is to analyze revenue growth and revenue share trends for Flyer Fund stocks and overseas markets over the period 2005-2011. The primary objectives are to determine: 1) How many of the 55 Flyer Fund companies are selling overseas, 2) How fast is overseas revenue growing, 3) Is share of total revenue coming from overseas increasing?, 4) Are companies selling overseas experiencing growth in their share prices? Overseas revenue growth rates and revenue share percentages are calculated for each year as well as for the complete period. Stocks are also identified by industry/sector classifications. Results of the analysis are forthcoming.

Same Old (New) Deal? Examining the Determinates of ARRA Spending

Presenter(s): Amy A Pancher
Advisor(s): Tony S Caporale
Economics and Finance - Honors Thesis

Some twenty-one months before the November 2010 elections, the United States Congress passed the American Recovery and Reinvestment Act of 2009, the primary goals of which were to preserve and create jobs, promote economic recovery, and to assist those most impacted by the recession. Previous studies have questioned whether political considerations played a role in the allocation of New Deal stimulus spending during the Roosevelt administration. The same question can be asked of the American Recovery and Reinvestment Act of 2009; was the $275 billion in government grants, contracts, and loans allocated solely in accordance with the legislationâs stated goals, or, considering the importance of an election held in a decennial census year and the subsequent congressional redistricting, did political determinates also play a role in how the funds were distributed?

Upside/Downside Capture Ratios and S&P 500 Sector Returns in Volatile Markets

Presenter(s): Chris P Sammons, Jessica Thomas
Advisor(s): Robert D Dean, John E Rapp
Economics and Finance - Independent Research

The purpose of this study is to determine which S&P 500 sectors outperform in four types of markets. The first market is a long-term market that includes a series of upswings and downswings with an overall upward trend. We use the time period 2005-2011 to represent this type of market period. The second type of market, a downswing market, is represented by the time period 1/1/08-3/31/09. The third type of market, an upswing market, is represented by the time period 3/31/09-12/31/10. The fourth type of market is a trading range, or overall flat market, and is represented by the 12 months in 2011. Upside and downside capture ratios are calculated for all four market for all 10 S&P 500 sectors and compared for outperformance. Results are forthcoming.

Exploring the Job Shop Queuing Environment

Presenter(s): Zachary M Kaylor
Advisor(s): John J Kanet
MIS, OM, and Decision Sciences - Honors Thesis

My research revolves around the job shop environment. The job shop is an environment in manufacturing where jobs arrive randomly and take a random amount of time to complete. For instance, a maker of specialized metal parts most likely involves some sort of job shop. The job shop can also represent a bottleneck in a larger manufacturing process. The main obstacle in the job shop is the queue of jobs waiting to be worked upon. The trick is to order the queue so as to perform the jobs to optimize for various metrics. These metrics vary and involve things such as the average time in shop to the aggregate lateness of the jobs. My research explores the repercussions of ordering the jobs using various queueing rules under a variety of conditions.

SCHOOL OF EDUCATION AND ALLIED PROFESSIONS

The International Student Experience Assessment Project

Presenter(s): Allison R Seaver
Advisor(s): Amy E Anderson, Susan C Davies
Counselor Education and Human Services - Graduate Research

This research study examines the various definitions of success that international undergraduate students hold for themselves, how they seek help when needed, and what resources and study strategies they used. Data for this study were collected in two phases through qualitative interviews and an online survey. International and American undergraduate students at a private Midwestern university were selected through random sampling. Sample groups were matched according to gender and major. Results from this study indicate that the primary way international undergraduate students define academic success for themselves is by applying their education to a future career. In contrast, American undergraduate students most often define their academic success by earning good grades. Both International and American students prefer to ask the class professor for help with an academic issue, and ask a friendâs help when the issue is personal. International and American students both report using time management strategies at least once per week in addition to frequent use of the computer and internet for their studies. In addition, International students reported higher use of dictionaries and translations devices, as well as more frequent trips to the library. The information collected through this study will inform higher education administrators of academic characteristics common among international students and help to revise university support services and admission procedures so they are better equipped to serve this population.

What's in Your Neighborhood? The Progress of Public Neighborhood Center Schools in Dayton and Cincinnati

Presenter(s): Danyell R Lewis
Advisor(s): Thomas J Lasley, Robert A Taft
Educational Leadership - Independent Research

The Cincinnati Public School (CPS) district has been the leading model for education in Ohio, with an overall Annual Report Card rating of âEffectiveâ. Part of this success can be attributed to CPS creating a district-wide initiative to improve schools. One program that seems promising is the Community Learning Centers (CLC) initiative, beginning in 2001. CLCs use schools not only as institutions of learning, but also as community âhubsâ. Partnerships between the district and local organizations help provide services including tutoring, mentoring, health/wellness, parent/family engagement and more. Resources are not only available to students and parents, but to the community at large. The current project makes use of Performance Index scores, Value Added measures, school building and district report card ratings, and other indicators to analyze the CPS Community Learning Centers program to draw comparisons to the Dayton Public Schools Neighborhood Center Schools initiative, which is modeled after the CPS program.

A Comparison of Metabolic Costs of Forward and Backward Treadmill Walking in Adult Females with a BMI of ¥30.0 and <40.0

Presenter(s): Chelsea M Boch
Advisor(s): Lloyd L Laubach
Health and Sport Science - Honors Thesis

The primary aim of this study is to assess the acute metabolic and cardiovascular responses of forward and backward walking specifically in an obese female population. Seven females with the following characteristics (mean ± SD) volunteered for this study: age 51 ± 4.2 years, height 163.9 ± 7.5 cm, weight 95.18 ± 8.75 kg , and BMI 35.44 ± 1.55 kg/m^2; all subjects were screened and with the exception of their BMI were considered healthy individuals. Participants' body composition was assessed using the Bod Pod and indirect calorimetry was used to measure metabolic cost. Subjects' metabolic energy was measured while walking forward at 1.0 mph and 2.0 mph at 2.0% grade and backward at 1.0 mph and 2.0 mph at 2.0% grade; all walking trials were 10 minutes in length. The results show statistically significant ($P < .05$) differences in absolute oxygen consumption, relative oxygen consumption, and heart rate between forward and backward walking at the same speed. This study suggests that more energy is required during backward walking in comparison to forward walking at the same speed and grade in a female population.

Health and Sports Science Career Paths

Presenter(s): Michael P Driscoll, Sara B Hamilton, Ashley M Robichaux, Morgan A Stehman
Advisor(s): Marvin D Ganote
Health and Sport Science - Independent Research

Our team project is about the career paths that you can take with in the different majors of the health and sports science college at the University of Dayton. Each member of our group will be discussing the career path they are interested in taking and will present more information about the health and sports science field.

Metabolic Equivalents of College-Aged Male Athletes

Presenter(s): Kathleen M Rusbacky
Advisor(s): Lloyd L Laubach
Health and Sport Science - Honors Thesis

The metabolic equivalent (MET) is a concept that is very commonly used by health professionals to express levels of intensity of exercise, and it is applied often due to its ease of use. A MET is equal to the resting metabolic rate (RMR), defined as oxygen consumption (ml/min) per body weight (kg), and intensity of exercise is expressed in multiples of this. The predicated value of a MET is equal to 3.5 ml oxygen per kilogram of body weight per minute. This value was determined from obtaining the RMR through resting oxygen consumption of one male, 40 years old, weighing 70kg. Due to the widespread use of the MET concept, Byrne studied the RMR of 671 subjects. These subjects varied by gender, weight (35-186 kg), and in age (18-74 years old). The goal of this study was to observe the validity of the 3.5 ml/kg/min value of a MET. The results of the study by Byrne showed that the RMR, or MET value was actually 2.6 ml/kg/min. This study will examine the RMR via open circuit spirometry (oxygen consumption and carbon dioxide production) of 10 men ranging in age from 18-25. Five of these me will be cross country runners with a BMI in the normal range (18.5-24.9), and five of these men will be football players with a BMI in the obese class I range (30.0-34.9) with these ranges provided by the ACSM. This study will compare the RMR rates to the accepted 3.5 ml/kg/min, and the 2.6 ml/kg/min value established by Byrne. This study will also include values of resting oxygen consumption compared with body weight, the amount of fat mass, fat free mass, and BMI.

Sugar, Sugar: How Much Sweetness Do You Really Need

Presenter(s): Kimberly R Boland, Andrea N Liptak, Erika A Thomas
Advisor(s): Janine T Baer, David B Ostrander
Health and Sport Science - Independent Research

The purpose of this presentation is to explain and interpret the differences between complex sugars, simple sugars, and sugar substitutions and determine the effects of diets high in added sugar. This presentation also evaluates the sugar content in common food items from places located on and around the University of Dayton campus. Dieting and healthy eating is often a controversial topic and can usually cause confusion among consumers. This presentation will explain the types of sugars found in foods to better communicate the underlying message that following diets high in simple sugars are associated with many negative physiological effects on the body. In addition, this presentation includes several examples of food items high in added sugar and presents these values in visual aid form. Grams of sugar have been converted to teaspoons of table sugar to clearly show the surprisingly high amounts found in everyday foods.

The Effects of a Structured Pedometer Exercise Program on Blood Pressure and BMI of Children Aged 9-12 Years

Presenter(s): Stephanie A Recko
Advisor(s): Lloyd L Laubach
Health and Sport Science - Honors Thesis

The purpose of this study is to determine the effect of a structured pedometer walking program on blood pressure and Body Mass Index (BMI) of children. The study utilizes a review of literature and case study research. The aim of the study is to discover whether the use of pedometers, small devices that count the number of daily steps, and daily step goals are effective in encouraging children and youth to become more active and improving their health. The hypothesis is that the program will help motivate children and youth to become more active and improve their

blood pressures and BMI's. The study found no statistical significant improvements in either blood pressure or BMI, but all subjects did improve their daily step count (2628.66 steps/day).

The Feasibility and Effect of a Kickboxing Training Program on the Balance, Gait, and Overall Quality of Life of Persons with Multiple Sclerosis: A Case Series

Presenter(s): Michele L Baeder
Advisor(s): Kurt J Jackson
Physical Therapy Doctoral Program - Honors Thesis

Physical activity may be utilized to reduce and prevent the secondary effects of multiple sclerosis. Kickboxing training is a non-traditional high intensity exercise which focuses on increasing balance, strength, and mobility. The objective of the case series is to examine the feasibility and effect of a 5-week kickboxing training program on the balance and gait of three individuals with MS. Five individuals with multiple sclerosis participated in the 5-week kickboxing study. Three participants completed all phases of testing and training. The program consisted of three training sessions per week, resulting in 15 total sessions. Outcome measures were tested on three separate occasions; baseline, pre-training, and post-training. Outcome measures included the Mini BESTest, Berg Balance Scale (BBS), Dynamic Gait Index (DGI), Timed Up and Go (TUG), walking speed, Activities Specific Balance Confidence Scale (ABC), and MS Quality of Life Survey (MSQOL). The only consistent improvement found was in balance confidence, as measured by the ABC scale. There was no improvement found in the balance measures, gait speed and health related quality of life. A kickboxing training program is feasible and safe for persons with multiple sclerosis. Further research may be needed with an increase in the number of participants and in the duration of the program may produce greater improvement of the outcome measures.

Cultural Competence: A Personal Journey to Becoming a Culturally Relevant Educator

Presenter(s): Margaret M Edison
Advisor(s): Beverly A Tillman
Teacher Education - Honors Thesis

This research project examines the researcher's cultural experiences and subsequent reactions toward them during a four-month study abroad program in Ireland. Daily experiences were recorded via journaling and then compared to research-based attributes of culturally responsive educators. The researcher compared the self-analysis of the journalsto research-based attributes of culturally-responsive teachers in an attempt to discover what qualities and skills the researcher needs to further develop and improve. From the comparison, an action plan for the researcher's professional development with regard to becoming culturally competent has emerged. This research project is significant because the researcher intends to be an urban teacher and therefore will be working with students of many cultures. Understanding what is required to be culturally competent will allow the researcher to successfully work with all students.

Educating Toward Attitudes in End of Life Care

Presenter(s): Nancy P Silverman
Advisor(s): Carolyn S Ridenour
Teacher Education - Graduate Research

With the intent of integrating educational activities into the existing medical school curriculum that prepare the attitudes of medical students to care for the terminally ill, this study seeks to determine the opportunities and constraints within the medical school environment that could potentiate or prevent its fruition. Crucial to understanding what is involved in developing this program is knowing what the physician seeking certification in palliative medicine is required to know. Building an introductory end of life care (EOL) program requires a survey of the requirements of governing agencies, accrediting bodies, the extent of current EOL program support, and time constraints. I will use Imogene King's dynamic interacting systems framework to direct the development of the program that introduces the concept of palliative care and attitudinally prepares them to provide palliative medicine to the terminally ill patient. Modalities for learning will be suggested that help teach to student attitudes. Program integration considers the school year and opportunities for patient exposure.

Efficiency, Adequacy, and Equity in Educational Funding: A Review of the Literature

Presenter(s): Grace M Callahan
Advisor(s): Patricia M Hart
Teacher Education - Honors Thesis

The public education system has recently been undergoing many changes, with new policies such as No Child Left Behind, an increased focus on high states testing, and the implementation of value added teacher evaluations; the ultimate goal being to raise achievement levels for public school students. In the midst of all of these changes, educational funding has become an important issue, with average per pupil expenditures growing from $6,663 in 1982-83 to $11,470 in 2004-05 (Grubb, 2009, p. 2). In response to the spending changes, many have studied whether or not there is in fact a correlation between school expenditures and student achievement. The question has become more and more important and controversial over the past few years, because the data gained from studies attempting to find an answer has an impact on policy, yet a definitive one has not been found. My purpose is to investigate the various reports on this topic to discover if any definite conclusions can be derived from the data. I will be reviewing the methodologies used to collect data and the analyses of the data presented. I will also draw upon other authors who have written about this topic and review their opinions and ideas. A theme that many researchers are beginning to agree on is that the use of educational funds is much more important than the amount, so I will also discuss the thoughts on how allocation of resources might be more affective in producing the desired result of increased student achievement.

Factors that Promote Long-term Memory in the American High School Mathematics Classroom

Presenter(s): Amanda E Morel
Advisor(s): Kathryn A Kinnucan-Welsch
Teacher Education - Independent Research

Long-term memory in mathematics is key for success in college and the expanding technical environment that we live in. High school is the vital time when the building blocks of advanced math are taught. This research will present the most effective factors that promote long-term memory in the American high school mathematics classroom. Many educators strive to find applicable teaching strategies that will assist students in storing mathematical concepts in the students' long-term memory. Research has suggested that creating an engaging environment, increasing the motivation and confidence in students, creating an âactive-sense making of the math materialâ, and proposing challenging and stimulating questions to the math student, will promote the long-term memory in the American high school mathematics classroom. Each of these areas are explored by interviewing leading researchers in teaching mathematics and brain retention and published literature.

Responding to Challenging Behaviors in a Preschool Setting

Presenter(s): Jamie L Dell
Advisor(s): Patricia M Hart
Teacher Education - Honors Thesis

The purpose of this Behavior Change Project is to demonstrate that by combining two widely accepted methods of behavior modification, a more effective outcome can be reached dealing with pre-school children that exhibit challenging behaviors. This study will take aspects of the constructivist approach which uses pro-social guidance to handle disciplinary issues and aspects from a more behaviorist approach which employs positive behavior supports. The Applied Behavior Analysis design methodology will be used to guide this study. After observing a child for two weeks and collecting baseline data, a plan will be developed to address the negative behavior. This plan will be implemented for two weeks. The intervention will be stopped and then the child will be observed to see if the child has adapted to the intervention or returns to the prior behavior. It is crucial to deal with challenging behaviors, especially at this stage in a young childâs life. If gone undirected, these habits can âinterfere with [childrenâs] learning and ability to develop relationships with peersâ (Moffett et al., 2008, p. 22). Ultimately, the goals of this endeavor are to add to the existing body of knowledge which aims to enhance the self-esteem and interpersonal relationships of young children. The Stander presentation will focus on Chapter 2 of the study, the Review of the Literature on challenging behaviors in young children, and the methods of responding to these behaviors. Work CitedMoffett, K. R., SwafÃord, M, & Richey, L. H. (2008). Merging developmentally appropriate practice with positive behavioral supports in early childhood programs. Dimensions of Early Childhood, 22 (2), 21-28. Retrieved from ERIC.

Appropriate Technology for Extraction of Essential Oils from Orange Peels in La Paz, Bolivia

Presenter(s): Monica A Guisfredi
Advisor(s): Amy R Ciric, Malcolm W Daniels
Chemical and Materials Engineering - Honors Thesis

Located near the rainforest, La Paz, Bolivia, has a large amount of waste orange peels currently being left unused that have the potential to become profitable since orange oil, an essential oil that retains the distinctive essence of the original plant, can be extracted from the peel. Essential oils, or concentrated extracts that are derived from a plantâs leaves, roots, blossoms, or other organic materials, have become integrated into society mostly as flavorings and fragrances, but can also be used in other areas such as medicine and aromatherapy. This project investigates past and current processes of essential oil extraction from orange peels, and an appropriate small scale distillation set-up was designed and built that is technologically feasible and sustainable for La Paz, Bolivia.

Artificial Neural Networks and Their Use in Process Monitoring and Diagnosis of an Industrial Injection Molding Process

Presenter(s): Rebecca L Greider
Advisor(s): Michael J Elsass
Chemical and Materials Engineering - Honors Thesis

This study utilizes a working artificial neural network (ANN) to monitor an industrial injection molding process. This ANN will be able to adapt and learn using training data obtained from the process. Outputs will be classified as normal or not normal based uponannotations made on the data by a plant engineer. This network will be able to recognize patterns in the data it analyzes and will also be able to model complex relationships in the data. The goal is to use the ANN to predict a future unusable part. ANN performance will beevaluated on how far in advance it can reliably predict an unusable part: several parts in the future versus the next one to be produced.

Carbon Nanofluids as New Liquid Coolants

Presenter(s): Lawrence W Funke
Advisor(s): Khalid Lafdi
Chemical and Materials Engineering - Honors Thesis

New technologies require greater cooling capacity than can be supplied by conventional fluids, such as water, ethylene glycol, or oil. The new nanofluids containing nanoparticles (one thousandth the thickness of a human hair) can significantly increase the cooling capacity of common fluids. This project aims to explore new fluids with added carbon nanoparticles. Ethylene glycol was used as the base fluid, and carbon nanoparticles with various crystallinities were added to the fluid. Fluids with different concentrations of additives (0 to 1%) were tested using three different apparatus to determine their cooling capacity under both static (stationary) and dynamic (in motion) conditions. It was found that the crystallinity and concentration of nanoparticles had a major effect. Results suggest that adding low concentrations of carbon nanoparticles with the proper crystallinity could greatly increase the heat transfer coefficient of the base fluid.

Controlling the Corrosion of Metals with Polyphenolic Proteins

Presenter(s): William F Nelson
Advisor(s): Douglas C Hansen
Chemical and Materials Engineering - Graduate Research

Flash rusting is a corrosion process in which steel rapidly oxidizes upon contact with air at a high relative humidity. The ultimate goal of this research is to develop a bio-inspired flash rust inhibitor that is water-soluble and environmentally friendly. Several proteins and polypeptides from two classes of marine invertebrates have been identified for their potential to inhibit corrosion: the blue mussel Mytilus edulis and the sea squirts Mogula manhattensis and Styela clava. The most important feature of these biomolecules for corrosion prevention applications is the presence of post-translationally modified amino acid L-3, 4 dihydroxyphenylalanine (L-dopa). L-dopa has a well characterized ability to form strong bonds

with metal ions, thus stabilizing the metal surface and inhibiting corrosion. Also, when enzymatically treated, L-dopa can participate in crosslinking reactions, which has been shown to lead to a thicker and more durable protein layer. In this study, cyclic potentiodynamic polarization was used to characterize the performance of the free amino acid form of L-dopa as a corrosion inhibitor. Mass loss and total charge passed were used to assess the extent of the corrosion reaction, and in addition, electrochemical impedance spectroscopy (EIS) data was also collected. The results indicated that L-dopa is ineffective as a corrosion inhibitor when not included as part of a larger polymer, most likely due to insufficient adhesion to the substrate. Preliminary exposure chamber tests were also done with an unpurified mixture of proteins from Mytilus edulis. The results indicate that the proteins are inhibiting corrosion effectively for a short amount of time before failing. To increase the effectiveness of the protein, different incubation conditions will be investigated in the future.

Effects of Pipe Orientation on Multi-phase Flow Patterns

Presenter(s): Heather N Nathaniel
Advisor(s): Robert J Wilkens
Chemical and Materials Engineering - Honors Thesis

Advances in avionics and weaponry are leading to higher thermal loads for next generation military aircraft beyond what traditional PAO coolant loops can handle. One proposed solution is to use a phase change fluid to capture the additional heat. Due to fluctuating orientation and heat load transient modeling is critical. As a first step, the focus of this work is to demonstrate the effects of orientation on flow patterns observed visually.

Electricity Generation using Sulfolobus solfataricus in a High-Temperature Microbial Fuel Cell

Presenter(s): Henry L Aldridge
Advisor(s): Donald A Comfort
Chemical and Materials Engineering - Honors Thesis

Microbial fuel cells (MFCs) are a developing technology that breaks down organic materials in liquids while generating electricity. They come in several forms and applications, including: micro-sized for medical implants, sediment for remote sensing and communications, and large-scale for industrial or environmental remediation. Few studies have looked at MFCs operating over 45°C. Use of extremophiles as the fuel cell culture allows for high-temperature applications including industry, deserts, and alien space environments. This project includes the construction and operation of a membrane-less single chamber microbial fuel cell (ML-SCMFC), using the hyperthermophilic archaeon Sulfolobus solfataricus at about 80°C. The volcanic spring native S. solfataricus was used within a MFC to demonstrate feasibility of an extremely high temperature MFC and characterize the electrical power parameters from this device. A maximum power density of 25.26 mWm-3 was obtained using a carbon cloth anode and cellobiose as the substrate. Maximum sustained current densities ranging from 5.63 and 39.9 mAm-2 persisted for 15-30 hour durations. Continued modifications can potentially improve observed values, including new substrates, inclusion of separators and new anode materials.

Suspension of Solid Mixtures by Mechanical Agitation

Presenter(s): Tianxin Bao
Advisor(s): Eric E Janz, Kevin J Myers
Chemical and Materials Engineering - Graduate Research

Agitation is a critical aspect of many processes, such as food production, mineral processing, and water treatment, with liquid-solid agitators representing a significant portion of all agitation installations. This research is concerned with solids suspension in a liquid-solid stirred tank at one particular agitation level just-suspended condition in which no solids rest on the tank base for longer than one to two seconds. The novelty of this work is that though there have been many studies on the just-suspended speed of uniform solid (solid particles with same shape, size, and density), there has been very little work in the industrially important area of mixtures of solids with different physical properties. The goal of this work is to investigate whether sum of the individual solids suspension powers approach can provide a reasonable estimate of mixture just-suspended speed of solids with different physical characteristics. All tested mixtures of solids with different properties (particle size, shape, and specific gravity) are categorized into three different groups based on the specific gravities of individual solids in each system: systems where the specific gravities of both solids are below 1.5 grams per cubic centimeter (i.e. low-density system), both solid densities are above 2.4 grams per cubic centimeter (i.e. high-density system), and solids of mixed densities - that is, a solid with low density plus a solid with high density. It is

found that the sum of powers approach can acceptably predict the just-suspended speed of both high-density and mixed-density solids systems while the predicted speeds from summing the individual solids suspension powers are typically ten to twenty percent greater than the measured speeds of low-density solids systems.

Synthesis and Properties of Carbon Microcoils

Presenter(s): Muneaki Hikita
Advisor(s): Yiling Hong, Khalid Lafdi
Chemical and Materials Engineering - Graduate Research

Carbon is very versatile element with various allotropic forms such as graphite, diamond, nanotubes and fullerene. While new carbon structures have been discovered, coiled shaped carbon fibers, or carbon microcoils (CMCs) might be potential materials for micro heating element for medical treatment, fabricating tunable electronics, bio-activators and fillers for composites.In this study, CMCs were prepared by chemical vapor deposition (CVD) technique using nickel catalyst in gas mixture (acetylene, hydrogen and argon) with a small amount of sulfur additives. The effect of temperature, time, gas flow rate and sulfur additive on the growth of CMCs formation were explored. It is found that the micro-coils quality and their uniformity are strongly depended on the amount of sulfur additive and temperature. CMCs were characterized using scanning electron microscopy, x-ray diffraction and micro Raman techniques. For biological application, CMCs were functionalized to improve their water solubility and their toxicity was tested using mouse embryonic stem (MES) cells. The toxicity of CMCs was evaluated by phase contrast, alkaline phosphatase (AP) staining assay and JC1 mitochondrial membrane potential (MMP) assay. The results indicated that CMCs have very limited impact to MES cells properties, and the medical application of CMCs will be safe.

The Effect of Dinitrophenol on Electricity Production by a Microbial Fuel Cell

Presenter(s): Mary A Untener
Advisor(s): Donald A Comfort
Chemical and Materials Engineering - Honors Thesis

Microbial Fuel Cells (MFCs) provide a renewable way to produce electricity, while also doubling as a method to treat industrial waste water streams. Just like traditional H2 fuel cells, MFCs produce current by creating a flowing of electrons. In MFCs, unlike hydrogen fuel cells, the electrons are catalytically extracted by microorganisms from complex electron donors, making MFCs a sustainable energy source. This experiment examines the effect of the toxin, dinitrophenol, on the electrical output of a MFC using the bacterium Pseudomonas aeruginosa. DNP is a decoupler which destabilizes the lipid bilayer membrane, hypothetically increasing the production of reducing equivalents by the cell. Concentrations of the toxin were varied to determine the dose dependent response of the MFC. By improving the outputs achieved in an MFC and understanding the effects of toxins on MFC performance, this renewable energy technology is one step closer to being functional on a large scale.

The Effect of Heat Treatment and Surface Functionalization on the Bio-Kinetic Behavior of Carbon Nanomaterials

Presenter(s): Kevin M Donnelly
Advisor(s): Khalid Lafdi
Chemical and Materials Engineering - Honors Thesis

Tissue engineering is a wide and rapidly growing field with many applications. As the field grows there has been a push to find improved materials to use in tissue scaffolds to improve their chemical and mechanical properties. Carbon nanomaterials have a wide variety of properties which could make them excellent scaffold materials. This study looks at four different carbon nanomaterials, which vary in size and heat treatment, to determine their respective cellular compatibilities and bio-kinetic effects. The study also tests the same materials with varying degrees of surface functionalization to determine its effect on the same cellular phenomenon.

Isolation and Characterization of Wastewater Phage

Presenter(s): Yexun Wang
Advisor(s): Denise G Taylor
Civil-Environmental Engineering and Engineering Mechanics - Graduate Research

Biological transformation processes are widely used in wastewater treatment, where those processes are dependent on mixed microorganisms, mainly bacteria. However, filamentous bacteria, a type of existing bacterial microorganisms in wastewater, need to be controlled to prevent excessive overgrowth that interferes with wastewater treatment. Current research on this program is seeking a biocontrol of filamentous bacteria via selective bacteriophages other than chemicals to protect other useful microbes. This project is to search for a number of phage groups that control the growth of specific filamentous bacteria in sludge production processes without interfering with the other bacteria. Samples were enriched for phage. Phages were isolated in one of two host bacteria and then selectivity tested against the other host. Sphaerotilus natans, a type of filamentous bacteria that is known in the activated sludge process, was used as the host with inoculating phages, as well as E.coli which may be common in wastewater treatment processes. Samples were obtained of supernatant from diverse treatment processes at various wastewater treatment plants. All the samples were thought to be good candidates since no article pointed out which process was better than the others. Other than the optimum control conditions regarding enrichment, maintenance and storage that is still being explored, the controls of growth, inoculation methods and storage of hosts would be recommended individually and compared with previous protocols.

Accelerating Robotic Arm Calibration on GPGPUs

Presenter(s): Chong Chen
Advisor(s): Tarek M Taha
Electrical and Computer Engineering - Graduate Research

We examine the acceleration of a robotic arm calibration algorithm using a general purpose GPU (GPGPU). The algorithm utilized requires a radial basis function neural network for calibration and takes approximately 9 days to run on a standard desktop computer. The most time consuming component of this algorithm is a matrix inversion operation. This is carried out on an NVIDIA GPGPU using the Cholesky Factorization. On an NVIDIA Tesla S1070 GPGPU, this same algorithm ran about 300 times faster than a standard desktop computer running an optimized version of the code.

Analysis of Motion Blur Using Double Discrete Wavelet Transform

Presenter(s): Yi Zhang
Advisor(s): Keigo Hirakawa
Electrical and Computer Engineering - Graduate Research

Object motion causes spatially varying blur. Estimating such a type of blur from a single image is an ill-posed problem that is difficult to solve. In this paper, we introduce the notion of double discrete wavelet transform (DDWT) designed to sparsify the blurred image and blur kernel simultaneously. Based on DDWT analysis, we are able to accurately estimate motion blur kernels and recover the latent sharp image. The blind image deblurring solution proposed here handles spatially varying motion blurs effectively and efficiently.

Barium Strontium Titanate Varactor-Tuned Spiral Bandstop Filter for Microwave Applications

Presenter(s): Hailing Yue
Advisor(s): Guru Subramanyam
Electrical and Computer Engineering - Graduate Research

A novel Barium-Strontium-Titanate(BST) varactor-tuned spiral bandstop filter (BSF) is presented. The BST varactor operation is based on the nonlinear dielectric tunability of BST thin film sandwiched between two metal layers in a conductor-backed coplanar waveguide(CBCPW) transmission line configuration. The varactor area is formed by the overlap area between the spiral shunt line in the bottom metal layer and the center signal line in the top metal layer. The considered spiral-structured devices of spiral shunt line sizes were designed, simulated and fabricated. The fabricated BSF is expected to achieve up to 40 dB rejection at microwave stop band with an optimized Q factor.

Memory-Based Motion Optimization for Unbounded Resolution

Presenter(s): Alan L Jennings
Advisor(s): Raul E Ordonez
Electrical and Computer Engineering - Graduate Research

People are not initially competent, but can become experts in almost any task. However, many optimizations and artificial intelligence techniques use a finite resolution that prevents `life-long' learning. This work presents a general purpose waveform shaping algorithm that continues to increase resolution as experience increases. The waveforms can represent motions, such as jumping where the height of the jump is controlled. A learned response for any output value comes by interpolating optimized waveforms. Performance is measured by 1) output accuracy 2) cost compared to its lower limit and 3) number of trials required. Comparison is made to bootstrapping a direct optimization on a mathematical system. Results on a physical system are also presented.

Obstacle Avoidance Techniques as Applied to Unmanned Aerial Systems

Presenter(s): Matthew L Hagenbuch
Advisor(s): Raul E Ordonez
Electrical and Computer Engineering - Honors Thesis

Historically, unmanned aerial systems (UAS) such as the Predator/Reaper drone have been used almost exclusively in military applications. The growing concern for the lives of military personnel has fueled an effort to replace men with machines in dangerousmissions wherever possible. The need has arisen to send UASâs into more complicated environments, such as urban areas or eveninside buildings. Because of the complexity of navigating such environments via remote control, it has become more and moredesirable to have these systems navigate autonomously. This thesis focuses on improving existing algorithms for autonomousnavigation.

Optimum Microarchitectures for Neuromorphic Algorithms

Presenter(s): Shu Wang
Advisor(s): Tarek M Taha
Electrical and Computer Engineering - Graduate Research

At present there is a strong interest in the research community to develop large scale implementations of neuromorphic algorithms. These systems consume significant amounts of power, area, and are very expensive to build. This thesis examines the design space of multicore processors for accelerating neuromorphic algorithms. A new multicore chip will enable more efficient design of large scale neuromorphic computing systems. The algorithms examined in this thesis are the HMAX and Izhikevich models. HMAX was developed recently at MIT to model the visual system of the human brain. The Izhikevich model was presented by Izhikevich as a biologically accurate spiking neuron model. This thesis also examines the parallelization of the HMAX model for studying multicore architectures. The results show the best single core architectures for HMAX and Izhikevich are almost same, though HMAX needs more cache. The multicore study shows that the off chip memory bus width and physical memory latency could improve the performance of the multicore system.

Phase Space Analysis to Detect and Remove Rain from Video

Presenter(s): Varun Santhaseelan
Advisor(s): Vijayan K Asari
Electrical and Computer Engineering - Graduate Research

Nowadays, the widespread use of computer vision algorithms in surveillance systems and autonomous robots has increased the demand for video enhancement algorithms. Bad weather conditions like rain affect the feature extraction process in videos and thus affect other post-processing operations. In this paper, we propose an algorithm based on phase congruency features to detect and remove rain and thus improve the quality of video. We make use of the following characteristics of rain streaks in video in order to detect them: (1) rain streaks do not occlude the scene at all instances, (2) all the rain streaks in a frame are oriented in a single direction, and (3) presence of rain streak at a particular pixel causes a positive change in intensity. Combining all these properties we are able to detect rain streaks in a particular frame using phase congruency features. The pixels in a frame which are identified as rain streaks are then replaced using the pixel information of its spatial and temporal neighbors which

are not affected by rain. When this method is used in conjunction with phase correlation, we are able to remove rain of medium density from videos even when complex camera movement is involved. By making the selection of candidate rain pixels in an adaptive manner, we were able to remove rain when moving objects are present in the scene. However, the movement is causing some noise along the edges in the resultant videos. We are in the process of devising a method to remove that noise. By excluding the directional property of rain streaks and including some constraints related to intensity, we were able to adapt the algorithm to removing snow from videos as well. However, the results are noisy and research is in progress to make the algorithm more effective in such scenarios.

Position-Adaptive Direction Finding for Multi-Platform RF Emitter Localization

Presenter(s): Huthaifa A Alissa
Advisor(s): Raul E Ordonez
Electrical and Computer Engineering - Graduate Research

Wireless Sensor Networks (WSNs) are being used in a variety of ways from reconnaissance and detection in military to biomedical applications and a wide variety of commercial endeavors. In recent years, position based services have become more important. Thus, recent developments in communications and RF technology have enabledsystem concept formulations and designs for low-cost radar systems using state-of-the-art software radio modules. This research focuses on a multi-platform RF emitter localization technique denoted as Position-Adaptive RF Direction Finding (PADF). PADF is based on the formulation and investigation of path-loss based RF scattering metrics (i.e., estimation of distributed Path Loss Exponent, or PLE) that are measured and estimated across multiple platforms in order to enable the robotic/intelligent position-adaptation (or self-adjustment) of the location of each platform. Experiments conducted at the Air-Force Research laboratory (AFRL) indicate that this position-adaptive approach exhibits potential for accurate emitter localization in challenging embedded multi-path environments such as in urban environments. In this study we use IRIS wireless sensor nodes. In order to localize the transmitter, we use the Received Signal Strength Indicator (RSSI) data to approximate distance from the transmitter to the revolving receivers. We provide an algorithm for online estimation of the Path Loss Exponent (PLE) that is used in modeling the distance based on Received Signal Strength (RSS) measurements. The emitter position estimation is calculated based on surrounding sensors RSS values using Least-Square Estimation (LSE). PADF configuration concepts are developed for purposes of investigating potential refinements in consistency, sensitivity, and robustness via the design and implementation of four stationary sensors as receivers and one hidden sensor as a transmitter during the localization phase.

Real Time Path Planning of Industrial Robots in an Unknown Environment Using Vision

Presenter(s): Hariharan Ananthanarayanan
Advisor(s): Raul E Ordonez
Electrical and Computer Engineering - Graduate Research

Industrial manipulators are machines that perform pre-programmed tasks with great accuracy and speed. The addition of intelligence through sensory perceptions would make them highly flexible in terms of performance and application. The objective of this research is to improve the performance of a six-degree of freedom industrial manipulator by introducing vision feedback and by using the data to generate its path in real time. This would enable the robot to generate its own path and alter it dynamically, based on the visual feedback. This technique will be finally used to catch a ball or pick a ball rolling on the floor. One of the industrial applications could be robotic recycling where a robot is required to pick up different objects from a moving conveyor.

X-band Miniaturized Coplanar Waveguide Band-pass filter with Coupled Resonator

Presenter(s): Chenhao Zhang
Advisor(s): Guru Subramanyam
Electrical and Computer Engineering - Graduate Research

Band-pass filter is the basic component in microwave/RF integrated circuit. It plays the extremelyimportant role in communication systems such as wireless, radar and GPS navigation systems. Thisproject develops a passive narrowband band-pass filter which works in X-band spectrum (8GHz-12GHz).The filter is fabricated on a 400μm thickness sapphire substrate with a 0.25μm thickness BST thin filmdeposited using a large area pulsed laser deposition system. Compared with traditional microstripfilters, it has miniaturized dimensions and good frequency tunability.

The filter is a grounded coplanarwaveguide structure which has 2.4mm by 2.4mm dimension with center frequency at 10GHz, thebandwidth is 0.4GHz, the insertion loss is 1.7dB and the quality factor is 25.

Building and Testing of an Adaptive Optics System for Optical Microscopy

Presenter(s): Zhenyu Yang
Advisor(s): Qiwen Zhan
Electro-Optics Graduate Program - Graduate Research

Adaptive optics (AO), as the technology of compensating the wavefront distortion can significantly improve the performance of existing optical systems. An adaptive optics system is used to correct the wavefront distortion caused by the imperfection of optical elements and environment. It was originally developed for military and astronomy applications to mitigate the adverse effect of wavefront distortions caused by Earthâs atmosphere turbulence. With a closed-loop AO system, distortions caused by the environment can be reduced dramatically. As the technology matures, AO systems can be integrated into a wide variety of optical systems to improve their performance. The goal of this project is to build such an AO system which can be integrated into high-resolution optical microscopy. A Thorlabs Adaptive Optics Kit was set up. A Shack-Hartmann Wavefront sensor, a Deformable Mirror and other necessary optics hardware was combined together on a breadboard, and the control software was also implemented to form the feedback loop.

Experimental Confirmation of Strong Fluorescence Enhancement Using One-dimensional GaP/SiO2 Photonic Band Gap Structure

Presenter(s): Jian Gao
Advisor(s): Andrew M Sarangan, Qiwen Zhan
Electro-Optics Graduate Program - Graduate Research

We report the experimental confirmation of the fluorescence enhancement effect using a one-dimensional photonic band gap (1D PBG) structure. This 1D PBG structure consists of periodic multilayer thin films with gallium phosphide (GaP) and silicon dioxide (SiO2) as the alternating high and low index materials. Strong evanescent field enhancement can be generated at the last interface due to the combination of total internal reflection and photonic crystal resonance for the excitation wavelength. In addition, the 1D PBG structure is designed as an omnidirectional reflector for the red-shifted fluorescent signal emitted from the surface bounded molecules. This omnidirectional reflection function helps to improve the collection efficiency of the objective lens and further increase the detected fluorescent signal. Compared with the commonly used bare glass substrate, an average enhancement factor of 69 times has been experimentally verified with quantum dots as the fluorescent markers. This fluorescence enhancer may find broad applications in single molecular optical sensing and imaging.

Metal Nanorod Structures: Electromagnetic and quantum confinement properties

Presenter(s): Li Li
Advisor(s): Joseph W Haus
Electro-Optics Graduate Program - Graduate Research

The purpose of this work is to understand electromagnetic plasmonic response and electron quantum confinement in an ellipsoidal metallic nanorod. The plasmon resonance of metallic nanorods displays geometric tunability controlled by the ratio of its minor to major axes. The surface plasmon resonance (SPR) of metallic nanorods (Ag, Au, Cu) based on Mie theory is studied for different geometries and physical environments. Moreover, we calculate the electron density of states for the nanowire geometry. Combining the density of state with the Fermi-Dirac distribution produces very sharp electron energy distribution. We present theoretical results based on SPR theory and the electron density of states. Our results are a first step in understanding more complex metal-insulator-metal structures for energy harvesting applications.

Transfer Matrix Approach to Propagation of Angular Plane Wave Spectra Through Metamaterial Multilayer Structures

Presenter(s): Han Li
Advisor(s): Partha P Banerjee
Electro-Optics Graduate Program - Graduate Research

The development of electromagnetic metamaterials for perfect lensing and optical cloaking has given rise to novel multilayer bandgap structures using stacks of positive and negative index materials. Gaussian beam propagation through such structures has been analyzed using transfer matrix method (TMM) with paraxial approximation, and unidirectional and bidirectional beam propagation methods (BPMs). In this thesis, TMM is used to analyze non-paraxial propagation of transverse electric (TE) and transverse magnetic (TM) angular plane wave spectra in 1 transverse dimension through a stack containing layers of positive and negative index materials. The TMM calculations are exact, less computationally demanding than finite element methods, and naturally incorporate bidirectional propagation.

Design, Prototyping and Evaluation of an Elastically-Based Mechanical Starter for Automotive Engines

Presenter(s): Travis M Schubert
Advisor(s): Andrew P Murray, David H Myszka
Engineering Technology - Honors Thesis

This thesis presents the design and prototyping of a torsion spring-driven mechanical starter for potential use in vehicle engines. Torsion springs are considered for this application for three primary reasons. First, a charged spring can deliver the brief but powerful burst of energy required during starting. Second, once the starting energy is stored in a mechanical state, as in a spring, conversion losses are eliminated like those present with the traditional battery to electric motor to engine arrangement. Third, these springs can be inexpensively charged by a motor and battery significantly smaller than those currently in use, thereby reducing the negative environmental impact associated with the disposal of those components. The realized design combines fundamental machine components into a new starter concept, a bench top prototype of which was assembled for validation. Experiments and an accompanying analysis of the starter proved useful for sizing the device for commercial implementation, as well as identifying additional design concerns for a more roadworthy prototype. This work is part of a larger effort on developing mechanisms that use elastic elements to harvest, store, and power devices useful in automotive applications.

Music and its Affect on Learning and Studying

Presenter(s): Jessica L Morell
Advisor(s): Michael J Kozak
Engineering Technology - Independent Research

Music is a part of our everyday lives and can affect us in many different ways. Music can have a great affect on the learning process. I have written a paper and have done a study that examines how listening to music can affect the learning and studying process. I did a study with fifty college students with different backgrounds, majors, study habits, ages, and genders. The study tests many of the different factors that are involved with how music can affect learning. The paper I have written includes all of my results and all of the research I have done about how music affects the learning and studying process.

A Pilot Study of the Effect of an Acute Vestibular Therapy on Postural Stability, Gait Variability, and Gaze Patterns of Children with ASD

Presenter(s): Senia I Smoot
Advisor(s): Kimberly E Bigelow
Mechanical and Aerospace Engineering - Graduate Research

Children with Autism Spectrum Disorder (ASD) struggle with sensory regulation, resulting in decreased motor control, unusual gaze patterns, and decreased postural stability. Sensory integration therapy is a common therapy used to help children with ASD with these issues, however, there is insufficient quantitative research concerning the actual results of sensory integration therapy with respect to human biomechanics. It is

the objective of this study to quantify the acute effects of a vestibular treatment on postural stability, gait variability, and gaze patterns. Nine children with ASD and three neurotypical controls will participate in this pilot study. Three subjects with ASD will have their step width variability and other gait parameters recorded using wearable inertial measurement units while walking an indoor path. Three subjects with ASD will have their center of pressure (COP) and sway area will be collected by standing on a balance plate under a variety of conditions. Gaze and fixation markers of three subjects with ASD will be recorded via eyes tracking equipment while subjects watched a short video. Once these baseline tests are conducted, subjects will undergo a conventional vestibular therapy session on a swing. Subjects will then be respectively retested to gauge any changes in balance, gait, and gaze patterns induced by the therapy session. It is anticipated that the subjects with ASD will display a significant increase ($p<.05$) in postural stability, a decrease in gait variability, and a decrease in self-regulating gaze patterns after undergoing a vestibular therapy session.

Bleed Hole Location, Sizing, and Configuration for Use in Hypersonic Inlets

Presenter(s): Leslie A Sollmann
Advisor(s): Aaron Altman
Mechanical and Aerospace Engineering - Honors Thesis

Flight in the hypersonic regime, approximately five times the speed of sound, has been of interest to militaries and commercial aviation enthusiasts for many years. Hypersonic airbreathing vehicles are desired for efficient long range cruise missiles, global reconnaissance, and access to space as they promise higher efficiency than current technology. Although there have been a few recent successes with government funded hypersonic programs, many technology gaps still exist and must be investigated before further progress can be accomplished for hypersonic vehicles. One of the limiting factors in the robustness of a hypersonic airbreathing engine involves starting inlets. In order to achieve sufficient combustion during flight, a vehicle must have a started inlet, an inlet in which there is no strong bow shock, no flow separation, and flow is not significantly disrupted by turbulent forces. There have been many techniques implemented to start an inlet such as retractable doors, variable inlet geometries, and mass extraction through perforations. Although the aforementioned techniques are all viable solutions, permanent perforations for excess air removal are arguably most beneficial due to ease in manufacturing and weight reduction of the overall inlet. This project analyzes the Molder Theory, a technique for developing bleed holes for excess air removal using necessary spillage area per unit length and the Kantrowitz Limit for hole spacing. To test the theory Computation Fluid Dynamics was completed on a simple axisymmetric Busemann inlet with various bleed hole configurations. Hypersonic wind tunnel tests are to be completed with a GoHypersonic Inc. axisymmetric Busemann scramjet inlet using the Kantrowitz Limit and Molder Theory for bleed hole configuration design. Experimental results will be obtained for validation of the Molder Theory for perforation location and sizing.

Designing Planar, Shape-Changing Rigid Body Mechanisms for Profiles with Significant Differences in Arc Length

Presenter(s): Shamsul A Shamsudin
Advisor(s): Andrew P Murray
Mechanical and Aerospace Engineering - Graduate Research

Design of shape-changing machinery is an area of emerging importance. Shape-change may be used in the near future to vary the cross section of a wing, create flow-field control by altering shapes to locally affect downstream fluid behavior, or create extrusion dies with varying cross section critical in a variety of applications including automotive components. The three primary ways of creating shape-change are smart materials, compliant devices, and the focus of this research, rigid body shape-change. Each offers advantages over the other, with rigid body shape-change mechanisms providing the highest capacity to withstand loads and the easiest-to-predict behavior of the three. The goal of this research project has been to modify the synthesis theory to address shape-change where significant differences in arc length motivate the problem. In practical terms, this corresponds to a wing not only changing camber but also changing chord length in operation. The advances proposed here allow rigid-body shape change to address entirely new classes of problems. This is important as rigid body shape-change uses well established mechanical design practice once the bodies have been sized and joints located according to the new theory. These new techniques, combined with the established practice, provide a suite of design tools that allow for problems to be addressed in a fundamentally new way. Shape-changing technology has the capacity to advance manufacturing through an entirely new class of extrusion dies. The design of shape-changing spoilers, beds, wings and chairs are also being considered.

Novel Concepts for Spring-Based Mechanical Energy Storage in Motor Vehicles

Presenter(s): Jonathan W Lauden
Advisor(s): Andrew P Murray, David H Myszka
Mechanical and Aerospace Engineering - Graduate Research

Vehicle systems that store and retrieve energy have commonly relied on lead-acid or lithium-ion batteries as a storage medium. Springs are an alternative means of energy storage and could be used to supplement batteries in such systems. This would allow a reduction in the size of those batteries and the electric motors they operate, potentially accompanied with financial and environmental benefits. The general properties of springs suggest that they are well-suited for use in motor vehicle systems. Springs are able to provide a large amount of power relative to their size, and have the ability to store potential mechanical energy in a context where mechanical energy is required. In contrast, electrical energy-storage systems require additional motors and generators to apply or absorb mechanical energy. This research explores the utility of spring materials in automotive systems through the design and construction of a prototypical spring-based engine-starting system. The objectives are threefold: to determine the physical properties of several elastomers to assess their potential as energy-storage media, to derive the operating requirements and ideal size of a starting system from a production engine, and to design and build a prototype that is physically able to meet or exceed those operating requirements. Having accomplished these three objectives, the feasibility of using springs for other energy-storage systems may be explored, as well as the potential for large-scale production of such a system.

Rehabilitation Engineering: Design of a Shower Transfer Seat

Presenter(s): Rachael A Johanek, Alexander P Jules, Deborah M Kinor, Kendra M Rindler, Julia M Schaeffer, Erin E Sutton
Advisor(s): Kimberly E Bigelow
Mechanical and Aerospace Engineering - Independent Research

The Engineering Wellness and Safety Lab (EWSL), directed by Dr. Kimberly Bigelow, gives undergraduate and graduate students the opportunity to perform biomechanical engineering research. This semester, the research team has partnered with the Kettering Health Network and NeuroRehab and Balance Center to design a handicapped-accessible shower transfer seat, a need identified by occupational therapists. After researching many current shower seats and collaborating with occupational therapists and shower seat users, the EWSL developed a list of design requirements. These requirements will be incorporated in each of our designs: an adjustable peri-care door, adjustable legs with a large range of heights, corrosion resistant materials, mildew and mold resistant materials, adjustable for right and left shower heads, proper drainage in the seat and legs, backrest, supports 350 pounds, weighs less than 10 pounds, does not allow water to leak out of the shower, and costs less than 150 dollars for the user. The lab also created a list of design criteria which will us to choose the best design. The design criteria for this project are: safe, adjustable, compatible with curtain, durable, low effort, easy to remove, comfortable, intuitive, space efficient, accessories within reach, and easy to clean. The design requirements and criteria will be used to develop an appropriate design to test. The final functional prototype will be presented to the Kettering Health Network and the NeuroRehab and Balance Center at the end of this semester.

The Effect of Different Foams on Posturography Measures in Healthy and Impaired Populations

Presenter(s): Daniel J Petit
Advisor(s): Kimberly E Bigelow
Mechanical and Aerospace Engineering - Graduate Research

The manipulation of available sensory inputs is an important component in static posturography testing to examine one's multisensory reweighting ability and to identify potential balance problems that would otherwise be masked by compensation. Traditionally, to reduce the availability of proprioceptive input, subjects are asked to stand barefoot on a foam pad placed on top of the force platform. However, the choice of what kind of foam block to use often falls on the shoulders of the investigator or clinician as it is rarely well defined in testing procedures. While previous studies have investigated the effect of varying foam types on outcome measures, it has not been well investigated whether choice of foam influences the ability to differentiate between healthy and impaired populations using posturography. Anterior-posterior (A/P) and medial-lateral center of pressure displacement data was collected using a 3-component force plate. Each trial lasted 30 seconds with a sampling rate of 1000Hz. For this

protocol, a form of the modified clinical test for sensory integration of balance (mCTSIB) was used where a total of six trials were completed in randomized order. As expected, the surface did make a difference for all outcome measures (p>=0.001 for all). It was found that for Mean Velocity there was a statistically significant interaction (0.037), and for A/P Sway Range the p-value also approached significance (0.055). Post-hoc analysis for Mean Velocity revealed between-subject factor of disease was significant in each of the surface conditions, suggesting that while the values may be drastically different there is not currently compelling findings that the choice of foam better improves the ability to discriminate between disease states. As such, until standardization can be reached it does not appear to matter whether open-cell or closed-cell foam is used, but characteristics of the foam are important to report to allow study comparison.

The Effect on Postural Sway of Transitions from Non-Compliant to Compliant Flooring

Presenter(s): Renee L Beach
Advisor(s): Kimberly E Bigelow
Mechanical and Aerospace Engineering - Graduate Research

Balance is the ability to stand upright unassisted without falling and can be affected by the information that the brain receives through vision and muscle joints. Therefore falls from balance impairments become an issue in many neurological and elderly patients. Nearly 40% of falls in populations over 65 years old, result in admission to the hospital for some type of treatment. Designing environments, particularly flooring and transitions in flooring, to enhance balance and reduce falls in public buildings, especially rehabilitation centers and hospitals, is a necessary consideration. Novel compliant floors are an approach that may lead to less fall-related injuries. Initial studies have shown the promise of such floors, but have not looked at how individuals interact with the transition from novel compliant surfaces used in high-risk fall areas to traditional flooring surfaces. Additional studies are also needed to analyze balance on compliant flooring in anterior-posterior (AP) and medial-lateral (ML) directions. The purpose of this study is to analyze traditional non-compliant flooring (linoleum or tile) compared to novel compliant flooring (newer rigid materials with more absorbency) in fall-risk areas and determine the effect on postural sway of transitioning from one to the other. A secondary aim of this study is to determine if the Opal Sensor, a multi-axial accelerometer, performs as well or better than the Bertec balance plate as a measure of postural sway. It is hypothesized that the transition from compliant flooring to traditional flooring and vice versa on postural stability will not be significantly different ($p<0.05$) than walking on either surface without transition.

Electrical Properties of PEO-based Mixed Conductors

Presenter(s): Nisrin R Abdelal
Advisor(s): Binod Kumar
Mechanical and Aerospace Engineering, Clean Energy - Graduate Research

This project investigates the electrical and thermal characteristics of mixed conductor composites made of PEO:LiN(SO2CF2CF3)2 and activated carbon. The crystalline- amorphous transition in the mixed conductors was characterized by a differential scanning calorimeter (DCS). The ionic conductivity and the transport numbers were measured using the AC impedance and the potentiostatic techniques. The possibility of harvesting electrical energy from the ionic conductors when subjecting them to a mechanical excitation (vibrations) was investigated. Results showed that at room temperature the ionic conductivity of PEO:LiN(SO2CF2CF3)2 is 7.839X10-5 S/cm and it increased by almost five times when doped with 9wt% carbon. The ionic conductivity enhancement was attributed to two factors; to the space charge effect, and to the existence of the amorphous phase of the polymer as a result of dispersion of carbon particles. Results also showed that the electronic transport number increases with increasing the wt% carbon until it reaches its maximum value at 4wt% carbon. Finally, it was proven that it is possible to harvest electrical energy (in Micro-Joule) from the (PEO:LiBETI:C) mixed conductor when excited both electrically (with a small biased voltage) and mechanically(by mechanical vibration).

High Temperature Gas Chromatographic Analysis of Chlorella Vulgaris

Presenter(s): Ronald A Zeszut
Advisor(s): Richard C Striebich, Philip H Taylor
Mechanical and Aerospace Engineering, Clean Energy - Honors Thesis

The objective of this Honors Thesis is to assess the potential for algae of the variety Chlorella Vulgaris to be made into a jet fuel by analyzing the mono, di, and triglyceride content. Measuring the amount and type of these molecules in a sample will be done using high temperature gas

chromatography. The chromatography will separate the sample based on volatility (e.g. boiling point) of the species present. The sample data, when compared to known materials (e.g. standards), will give information as to the composition of the components which can be used as fuel. In addition, the samples will be further processed using a transesterification process. The glyceride molecules will be broken down into fatty acid methyl esters (FAMEs) and further analyzed using a GC-MS. The FAME process will allow for a better understanding of the component parts of the glyceride molecules, which in turn will provide a greater understanding of the glyceride molecules as a whole.

Solving the Mystery of Mixotrophic Algal Growth

Presenter(s): Michael E McArtor, Lawrence J Saliba
Advisor(s): Jerome C Servaites, Sukhjinder S Sidhu
Mechanical and Aerospace Engineering, Clean Energy - Independent Research

Algae are a diverse group of life forms, some of which are capable of utilizing sunlight (autotrophy) and organic substrates (heterotrophy) for growth. Some algae are able to grow in both of these modes simultaneously (mixotrophy). Our objective is to determine if Chlorella vulgaris can produce elevated levels of oil while growing mixotrophically and also fix a significant amount of CO2 compared to purely autotrophic growth. C. vulgaris was grown on different substrates to investigate the effect of the substrate on growth and carbon fixation.

Toxic Organic Pollutants from Combustion of Printed Circuit Board Laminates: A Cone Calorimeter Study

Presenter(s): Kavya Muddasani
Advisor(s): Sukhjinder S Sidhu
Mechanical and Aerospace Engineering, Clean Energy - Graduate Research

Printed circuit boards (PCBs) are found in consumer and industrial electronic products such as computers and cell phones.PCBs contain flame-retardants for fire prevention safety measures. The Purpose of this study was to use a cone calorimeter to measure emissions from fully ventilated combustion of printed circuit board laminates. The Cone calorimeter at the University of Dayton Research Institute (UDRI) was modified to sample the total gas from the combustion of the PCBs. All combustion effluents are sampled across the filters and PUF cartridges. All the samples collected were extracted and analyzed at the EPA Research Triangle Park laboratory. Collection and determination of emissions of polychlorinated dibenzo-p-dioxins and furans (PCDD/Fs), polyaromatic hydrocarbons (PAHs), hexachlorobenzene (HCB), polychlorinated biphenyls (PCBs) and other pollutants (e.g. containing phosphorus) of concern from thermal treatment of different types of printed circuit boards were conducted according to USEPA method T09A and the uncertainties associated with data collection of critical measurements needed to develop the reliable emission factors were determined.

Thermal Transport Across Watre-Graphite Interfaces

Presenter(s): Daniel E Forero
Advisor(s): Charles E Browning, Maceo E Cofield, Patrick Shamberger
Minority Engineering Program - Independent Research

Thermal management of USAF system & platforms requires thermal energy storage materials (TES) that can rapidly store large transient pulses of heat. Composites of salt hydrates and graphitic foam offer high thermal storage capabilities and high thermal conductivities. However, thermal transport across graphite-hydrous salt interfaces may limit the heat transfer through such a composite. Here, laser flash analysis was used to measure thermal diffusivity across graphite-water-graphite stacks and effective diffusivity of water layer and interface was determined. The effect of surfactant-water mixtures and two different surface treatments were analyzed. For all cases, including pure water interfacial layers, the measured effective diffusivity was lower than the accepted literature value for pure water (by 20% in the case of pure water). In the case of the surfactant-graphite mixtures, effective diffusivity is a function of the surfactant concentration. These differences suggest the importance of interfaces within composites.

COLLEGE OF ARTS AND SCIENCES

An Ecological and Historical Perspective on the Glen Helen Region of Yellow Springs

Presenter(s): Frances D Albanese
Advisor(s): Ryan W McEwan, Sean Goins
Biology - Course Project, 12_SP_BIO_421_P1

Historical Ecology is a discipline that pieces together human land use, environmental factors, and forest dynamics over the course of a historical timeframe to better understand the current ecology of a region and point us in the direction of accurate restoration. This is the mindset in which the study of Glen Helen, a one thousand acre region in Yellow Springs, owned by Antioch College, has been approached. Frances Albanese and Graduate student Sean Goins, under the direction of Dr. McEwan, have pieced together the rich and complex forest dynamics and human history of this beautiful region. What may appear to be an old growth forest has functioned as a vacation and health resort, served as a stage coach road, provided land for agriculture and orchards, and even played host to a short-lived cult Commune as recently as the late 1800's. In congruence with this knowledge is the intricate analysis of tree ring data from the property, with samples that are over 300 years old. This multidimensional approach allows one to appreciate the beauty of the region, and understand more fully how human history and the forest itself can direct restoration.

Differential toxicity of silver and titanium dioxide nanoparticles on Drosophila melanogaster development, reproductive effort, and viability: Size, coatings and antioxidants matter

Presenter(s): Kyle R Murphy
Advisor(s): Mark G Nielsen, Jayne B Robinson, John J Rowe
Biology - Course Project, 11_FA_BIO_421_P1

Silver and titanium dioxide nanoparticles are known to induce oxidative stress in vitro and in vivo. Here we test if they impact development, mating success, and survivorship in Drosophila melanogaster, and if so, if these effects are reversible by antioxidants. Ingestion of nanotitanium dioxide during the larval stage of the life cycle showed no effects on development or survivorship, up to doses of 200 ¼g mL1. Conversely, ingestion of nanosilver had major dose, size, and coating-dependent effects on each of these aspects of life history. Each of these effects was partially or fully reversible by vitamin C. Larvae growing on nanosilver supplemented with vitamin C showed a greater than twofold increase in survivorship compared to flies reared on nanosilver alone, and a threefold increase in mating success. Vitamin C also rescued cuticular and pigmentation defects in nanosilver fed flies. Biochemical assays of superoxide dismutase and glutathione show these markers respond to nanotitanium dioxide and nanosilver induced oxidative stress, and this response is reduced by vitamin C. These results indicate that life history effects of nanosilver ingestion result from oxidative stress, and suggest antioxidants as a potential remediation for nanosilver toxicity. Conversely, the lack of nanotitanium dioxide life history toxicity shows that oxidative stress does not necessarily result in whole organism effects, and argues that nanoparticle toxicity needs to be examined at different levels of biological organization.

Importance of Filter Feeding Organisms for Water Quality

Presenter(s): Emily M Motz
Advisor(s): Albert J Burky
Biology - Course Project, 12_SP_BIO_461_01

The purpose of the experiment is to explore the natural importance of filter feeding organisms for water quality. This will be demonstrated with a filter feeding organism clearing a graphite suspension. Another point of discussion is that invading species, such as the nonnative Zebra mussels, can tip the environment dynamic out of balance if too much is strained. A balance of filter feeding is crucial for water quality.

Sexual Assault on College Campus

Presenter(s): Kristen R Ashley, Katherine A Braunscheidel, Megan A Collins, Alexandria L Digby, Amy E Fox, Allison M Herbe, Emily F Hoelter, Ellen A Mack, Eleanor W Mccormick, Jack C Pearson, Travis D Pescatrice, Kelly N Plazibat, Justin A Woods
Advisor(s): Annette M Taylor
Communication - Course Project, 12_SP_CMM_330_05

This project includes stories, fact sheets and announcements designed to educate students about the problem and effects of sexual assaults that occur on college campuses. This work also includes information about the many resources available at the University of Dayton to help victims and their loved ones. The materials are being used to promote activities being held at UD during April, which is Sexual Assault Awareness month.

Who Is a Journalist?

Presenter(s): Anna L Godby
Advisor(s): Annette M Taylor
Communication - Course Project, 12_SP_CMM_432_01

Anyone can become a "publisher" by developing a website. Anyone can report news and information online. Identifying anyone as a journalist if he/she has a website has legal implications. In libel law, the press is given some protection because of "a profound national commitment to the principle that debate on public issues should be uninhibited, robust and wide-open," as Justice Brennan wrote. How courts define "journalist" will determine when the "fault" element in libel cases is applied and, thus, providing the press some leeway in order to preserve First Amendment values.

Business Communication at ArtStreet Cafe

Presenter(s): Lauren E Hennessy, Bryan P Misencik, Elizabeth A Rose, Harry E Sullivan IV
Advisor(s): Amanda J Wright Cron
English - Course Project, 12_SP_ENG_372_01

In the present business world, communication can be difficult due to continuous changes of employees in the work place. This study explores the communication practices for the professional setting that occurs at ArtStreet. In particular, the focus is on the Rhetoric between employees and how it affects day-to-day operations. Research results should stress the importance of professional communication application throughout all levels of a business. Methods used within this study include observations, direct interviews, and analysis of documents. Observation will occur throughout a two-week period for a total of 32-hours. Those observed include four employees of ArtStreet Cafe along with two of the managers for the facility. Observation of the physical characteristic of the facility will be recorded as well, along with informal, face-to-face interaction with open-ended interview questions. Documents collected from the business include flyers, promotions, memos and financial information. This method results in more detailed feed-back and personal opinions to be applied for analysis. Our study uses qualitative data to support our argument. This data will be gathered from a blend of our research methods. Analyses of results hope to support the argument of the importance of effective communication in an organization. Professional rhetoric will help to aid in successful communication and improve financial stability. In particular, the results can aid in the immersion of new employees into the company. From this research we hope to conclude the importance of effective communication within ArtStreet. The results will be of significance to anyone currently in a professional setting or those planning to enter one in the future. Proposal of new rhetoric techniques should be applied to the hiring of new employees to the facility.

Communication Tactics in Information Technology

Presenter(s): Brandy M Brown, Kyle D Speicher
Advisor(s): Amanda J Wright Cron
English - Course Project, 12_SP_ENG_372_01

Over the past thirty years, research on communication practices in professional organizations has significantly increased. This project will add to the discussion by focusing on the communication patterns in a technology driven organization. Communication procedures at the University of Dayton's Flyer Enterprise IT department have been observed. As communication practices stand now, the IT department employees rely heavily

on verbal communication to express large sets of data and extensive projects. The research conducted provides evidence of alternative solutions that would increase communication and work flow. The project gathers and utilizes qualitative data, interviews, field notes, and other written documents to gain knowledge about the organization's communication practices. After reviewing the information, the project will give qualitative results about the efficiency and productivity of FEIT's communication practices. The project's conclusion provides feedback on ways to improve communication functionality. The results include specific examples on ways to improve language used, context, or other forms of rhetoric to increase FEIT's communication abilities.

Developing Each Child Academically: Applying Marianist Ideals

Presenter(s): Michael M Dogal, Seth D Holdmeyer, Alyssa Pool, Emily C Spirk, Chelsea M Wisniewski
Advisor(s): Matthew D Archer, Meredith L Doench, William H Johnston, Monalisa M Mullins, Lori G Phillips-Young, Margaret M Strain
English - Course Project, 12_SP_ENG_102_B1

The Building Communities through Social Justice Learning and Living Cohort (BCSJLLC) strives to help students understand the importance of social justice and its impact on communities while providing students with opportunities to grow as leaders. The cohort integrates classroom education with service learning opportunities. This fall we participated in the first annual Book Buddy Program with the Cleveland Elementary School. Each member of the LLC donated a new book for a student in grades 4,5, and special education. All BSCJLLC members were trained by its community partner Project READ to tutor students in K-8 and young adults. Project READ then placed us in tutoring positions at the Dayton Early College Academy (DECA). DECA is an alternative college prep school for students run by the University of Dayton. This school offers students a better opportunity to excel academically so that they are able to achieve their goal of graduating from high school and attending a college of their choice. We each worked with our students on various assignments, such as drafting and revising English papers, practicing vocabulary, developing fundamental math skills, and improving their literacy skills through reading. Not only were we helping the students, but we also learned patience, the importance of education, as well as the responsibility to assist other members of society. Through our work we were able to apply the Marianist values of learning, leading, and serving into our daily lives.

Discovering Peace in Dayton

Presenter(s): Nicola Cerilli, Samuel W Orman, Christina J Rose
Advisor(s): Matthew D Archer, Meredith L Doench, William H Johnston, Monalisa M Mullins, Lori G Phillips-Young
English - Course Project, 12_SP_ENG_102_B1

The Building Communities through Social Justice Learning and Living Cohort (BCSJLLC)is an opportunity for students to get involved with many aspects of social justice whether they are at the local, regional, national, or global level. The BCSJLLC has provided multiple opportunities for education, community service, and civic engagement. We participated in the Dayton Peace Plunge sponsored by the UD Center for Social Concern. The purpose of this Peace Plunge was to give participants an overall understanding of peace and how it can come from within and from out of the environment around us. We visited the Dayton Peace Museum, Missing Peace Art Space, and the Kin Killing Kin exhibit at the EbonNia gallery of art. At the exhibits we discussed and pondered the different meanings of peace. We viewed the history of peace and each of us reflected on what peace means to us, how we can apply it to our daily lives, and how it impacts the lives of others. We saw the violence and animosity that is present in our society depicted in many ways. The Peace Plunge has given us the opportunity to reflect on our personal growth, what it means to be human in the 21st century, and how we can have a positive impact on our society through education, reflection, and action.

Enhancing Adolescent Development through Service Learning

Presenter(s): Liam G Buckley, Thomas M Cipiti, Jacob R Ewing, Travis R Venanzi, Zachary R Wisniewski
Advisor(s): Matthew D Archer, Meredith L Doench, William H Johnston, Monalisa M Mullins, Lori G Phillips-Young, Margaret M Strain
English - Course Project, 12_SP_ENG_102_B2

As members of the Building Community through Social Justice Learning and Living Cohort (BCSJLLC) we are committed to improving literacy rates in the Miami Valley. We pursued this ideal in the fall by donating new books to children in the fourth, fifth, and special education classes at

Cleveland Elementary School, a Dayton inner city school. The BCSJLLC community partner, Project READ, trained us to tutor students in grades K-8 and young adults as a part of our service learning commitment. After our training, we were placed in tutoring positions at Holy Angels Elementary School and the Dayton Early College Academy (DECA). We developed relationships with our students by helping them with their reading, vocabulary, and classroom assignment. We feel that our service learning filled a need at our volunteer sites and helped us to better understand the importance of service learning and its effects. As members of the BCSJLLC, we were able to learn and apply the Marianist ideals of lead, learn and serve for the benefit of our community.

Finding Inner and Outer Peace

Presenter(s): Erin M Crotty, Kara L Fry, Olivia C Thobe
Advisor(s): Matthew D Archer, Meredith L Doench, William H Johnston, Monalisa M Mullins, Lori G Phillips-Young, Margaret M Strain
English - Course Project, 12_SP_ENG_102_B1

Building Communities through Social Justice Learning and Living Cohort (BCSJLLC) is a freshman cohort experience whose mission is to promote service learning as a way of advancing social justice and the Marianist ideals of lead, learn, and serve. Members of our group performed service learning activities in two different ways and in two very different settings. Erin volunteered with Acclaim Hospice while Kara and Olivia participated in a one-day Peace Plunge sponsored by the Center of Social Concern. Acclaim Hospice is an organization that provides companionship and peace for terminally ill patients that have a prognosis of six months or less of life. The types of service activities that Erin performed included reading to the patients, talking to them about their life and watching television shows together. The Peace Plunge is a one-day experience that helps participants focus on inner and outer peace. The activities that Kara and Olivia participated in included visiting the Dayton International Peace Museum to learn how other countries around the world work to achieve peace. They also visited an art gallery that displays works of a local artist, James Pate. His work focuses on how African Americans have worked to reach peace in the past and how they are working to reach inner peace now. The gallery experience focused specifically on how African Americans are gaining peace through learning and embracing their history. This experience also addressed how important it is for young African Americans to embrace peace so that they see how they can turn away from involvement in gangs, for example. We saw that no matter how small an act of kindness is, it contributes to peace. Both service learning experiences offered the opportunity for inner and outer peace to us and to people in the Dayton Community.

Flyer Enterprises: The Blend,A Business Communications Study

Presenter(s): Sean T Belanger, Matthew E Crawford, Stephen F Gilbert
Advisor(s): Amanda J Wright Cron
English - Course Project, 12_SP_ENG_372_01

Researchers and communications specialists have written extensively on the subject of business communications and the linkage between communication and performance. By their example, this study will examine a business, describe their communications practice, and illuminate the effects of their communication on their business performance (Doheny-Farina, 1986; Spinuzzi, 2007; Winsor, 2001). The objective of this study is to examinhe and gain an understanding of the way Flyer Enterprises: The Blend as a business communicates internally and externally, and how it relates to their success as an organization. This study will be administered through quantitative and qualitative methods. For example: anonymous surveys, employee interviews, and collection of data through printed material like training manuals and electronic communications. Involves participation of 5-6 individuals associated with The Blend including employees, managers, and customers. One additional purpose of this study is to find and shed light on a communications issue within the business and provide a remedy.

Flyer For-ex Fund

Presenter(s): Brendan W Bruns
Advisor(s): Amanda J Wright Cron
English - Course Project, 12_SP_ENG_372_01

Harrison (1987) sought to determine how one specific communication practice, writing, helps shape organizations. Over the course of the past 25 years, communication practices have helped shape many organizations. When this project observes the Flyer For-ex fund, the primary objective is to determine what communication practices this particular group uses, whether that is writing or another form of communication. More specifi-

cally, the project wants to see what communication practices help drive the Flyer For-exâs fundsâ success. In doing this, the project will include qualitative research such as interviewing a select number of the 40 participants in the Flyer For-ex fund, as well as the faculty member in charge of creating the Flyer For-ex fund. The project will observe some of the firmâs meetings in order to analyze and determine how they accomplish their work. In addition, this project will also analyze the communication documents given to all members of the fund such as policies and procedures or meeting notes. After completing this primary research, the project identifies how communication practices drive the For-ex fund to the success that they have. More specifically, the project will determine what communication practices may be helping the Flyer For-ex fund, as well as identifying certain communication practices that may be considered detrimental to the group. Finally, this project proposes remedies to some of the things that may be considered detrimental.

Flying with Angels

Presenter(s): Mariana Lopes, Allison C Mckenna, Alexandra J Rolnick
Advisor(s): Matthew D Archer, Meredith L Doench, William H Johnston, Monalisa M Mullins, Lori G Phillips-Young
English - Course Project, 12_SP_ENG_102_B3

The Building Communities through Social Justice Learning and Living Cohort (BCSJLLC) strives to help students understand the importance of social justice by focusing on educating the whole person. This is done by linking learning and scholarship with leadership and service learning. The primary mission of the BSCJLLC is literacy and all cohort members performed service learning in the community by tutoring. The cohort was trained by the LLC's community partner Project READ to tutor students in K-8 and young adults. Project READ then placed us in tutoring positions at Holy Angels Catholic School. The mission of Holy Angels Catholic School is to help their students excel academically while growing in leadership and faith. Through our partnership with this school we have built relationships with our students and the staff and learned more about the Dayton community. We worked with a fifth graders helping them with their multiplication and division tables, we assisted first graders with recognizing their vocabulary words on sight, and we read one-on-one to kindergartners. We believe our service learning experience helped our students; but we know they have helped influence and made a difference in our lives by allowing us to apply the Marianist principles of lead, learn and serve.

Fostering Literacy in Dayton City Schools

Presenter(s): John H Buerschen, Elizabeth B Harbaugh, Eleanor W Mccormick
Advisor(s): Lori G Phillips-Young
English - Independent Research

As participants in the Building Community through Social Justice Learning and Living Cohort (BCSJLLC) our goal is to advance the cause of literacy in the Miami Valley through service learning. The BSCJLLC's community partner, the non-profit organization, Project READ, trained us to tutor students in grades K-3 and young adults. Members of our group were then placed by Project READ in tutoring assignments in DECA with high school students and in Cleveland Elementary School with first and third grade students. Our mission was to help improve the student's vocabulary and ability to read. We were consistently challenged by the different ages and skill levels of the individuals we were instructing; and the challenge to encourage and not direct our students. We found that developing personal relationships with our students helped us to encourage their overall learning and specifically helped them to gain confidence in their ability to improve their reading and vocabulary skills. Working with students in Dayton's inner city schools allowed us to see firsthand the education disparities that exist in America. As students, we believe that all people in a just society should be able to read and write. In our presentation we will reflect on how the combination of our service learning, the classes we have taken in our cohort, and our training by Project READ worked to advance the common good of the students we tutored. We will also explore the importance of our work in the context of the Marianist ideals of Lead, Learn, and Serve.

11:00 AM to 12:30 PM

From UD to DECA

Presenter(s): Megan C Guy, Jacqueline R Musser, Joseph P Riazzi
Advisor(s): Matthew D Archer, Meredith L Doench, William H Johnston, Monalisa M Mullins, Lori G Phillips-Young, Margaret M Strain
English - Course Project, 12_SP_ENG_102_B3

The Building Communities through Social Justice Learning and Living Cohort (BCSJLLC) strives to help students understand the importance of social justice and its impact on communities while providing students with opportunities to grow as leaders. As members of BCSJLLC we have been participated in many social justice activities in the Dayton area. One of our community partners is Project READ, a non-profit organization that trained us how to tutor students and then placed us with The Dayton Early College Academy (DECA). DECA is a college prep high school that is focused on preparing urban students to graduate and continue on to college. We have been tutoring students from diverse backgrounds and socioeconomic levels and engaging them in academic tasks that include learning the biological process of the cell, revising English papers, doing science worksheets, studying geography, math and graphing various objects, and generally supporting their goal of becoming a college student. In the course of our service, we have built meaningful relationships with our students. Our experiences have given us an appreciable amount of insight into to a world beyond the University of Dayton. And, our civic engagement at DECA has allowed us to apply the Marianist ideals of lead, learn, and serve.

Guiding Little Angels: A Literacy Experience at Holy Angels Elementary School

Presenter(s): Domenic M Miccinilli, Eric W Mueller, Erik D Stanbery
Advisor(s): Matthew D Archer, Meredith L Doench, William H Johnston, Monalisa M Mullins, Lori G Phillips-Young, Margaret M Strain
English - Course Project, 12_SP_ENG_102_B1

The Building Communities through Social Justice Learning and Living Cohort (BCSJLLC)is committed to the ideal of improving literacy in the Greater Miami Valley. During our first semester, our cohort participated in the first annual Book Buddy Program with Dayton's Cleveland Elementary School. We donated brand new books to students in the fourth and fifth grade and to students in special education. The BCSJLLC's community partner, the non-profit organization Project READ, trained us to tutor reading for students in grades K-8 and young adults. Then Project READ placed us in tutoring positions at Holy Angels, a private elementary school. Holy Angel's mission is to guide its students to academic excellence. Our mission was to support the classroom teachers and to assist five and six year-old students with their reading and vocabulary skills. Our tutoring time was spent going over math worksheets, alphabet flashcards, their spelling words, and reading books with students. Throughout the spring we have learned more about the Dayton community and through our service we have learned more about the importance of the Marianist ideals of lead, learn, and serve.

Helping Angels Find Their Wings

Presenter(s): Henry P Hessel, Matt D Hurtubise, Jake W Kocinski
Advisor(s): Matthew D Archer, Meredith L Doench, William H Johnston, Monalisa M Mullins, Lori G Phillips-Young, Margaret M Strain
English - Course Project, 12_SP_ENG_102_B1

The Building Communities through Social Justice Learning and Living Cohort (BCSJLLC) strives to help students understand the importance of social justice, community service, and civic engagement while providing students with opportunities to grow as leaders. The LLC's primary mission is literacy and all BSCJLLC members performed service learning in the community by tutoring. All members of BSCJLLC were trained by the LLC's community partner Project READ to tutor students in K-8 and young adults. Project READ then placed us in tutoring positions in local elementary schools like Holy Angels Grade School. Throughout our tutoring we developed great relationships with the students and assisted teachers that were overworked. We helped students improve their skill in math, reading, and writing by using a number of educational strategies like flashcards to help them memorize and pronounce words. It is through this program that we learned how to carry out the University of Dayton's mission of civic engagement at the local level and to apply the Marianist principles of learn, lead, and serve.

Illuminating the Issue of Literacy

Presenter(s): Alexis Niekamp, Kilee A Weiskittel, Meghan A Winter
Advisor(s): Matthew D Archer, Meredith L Doench, William H Johnston, Monalisa M Mullins, Lori G Phillips-Young, Margaret M Strain
English - Course Project, 12_SP_ENG_102_B1

The Building Communities through Social Justice Learning Living Community (BCSJLLC) is a first-year program at the University of Dayton whose mission is to promote literacy and the advocacy of social justice through service learning in the Greater Dayton/Miami Valley neighborhoods. To help promote literacy in the community, we participated in the first annual Book Buddy Program with the Cleveland Elementary School. The BCSJLLC community partner, Project READ, trained the LLC students as tutors and then placed us with students in the Dayton Early College Academy (DECA). DECA's mission is to assist high school students to graduate and then attend college. At DECA, we worked with seventh grade students to help improve their skills in basic math, reading and vocabulary skills, fundamentals of science, and organizational skills. We found that as our service learning gave us the opportunity to develop personal relationships with the students and to provide much-needed assistance to the DECA teachers. Through this experience and the application of what we have learned in our cohort classes and tutoring training, we have gained a better understanding of the Marianist ideals of lead, learn, and serve.

Immigration and Refugee Plunge: A Social Justice Learning Living Cohort Community Project

Presenter(s): Ian P Fitzpatrick, Victoria J Lewis, Nicholas D White
Advisor(s): Meredith L Doench, Monalisa M Mullins, Lori G Phillips-Young
English - Course Project, 12_SP_ENG_102_B2

The Building Community through Social Justice Learning and Living Cohort is an opportunity for first-year students to get involved with many aspects of social justice locally, regionally, and globally. One of the greatest current challenges to our democracy is the issue of immigration. There are several issues that confront our society and the people wishing to immigrate to the United States. Our group explored this issue first-hand by participating in The Immigration and Refugee Plunge, an event sponsored by the Center for Social Concern in the spring of 2012. This plunge was designed to give participants a better look at the process and the problems many foreign nationals face navigating their way through the US Immigration Service. We will be reflecting on the principles and practices of the system; the benefits of the current system; the negative aspects of the process; and, how maintaining the status quo can impact immigration and our democracy.

Improving Literacy in the Miami Valley

Presenter(s): Emily A Pannier
Advisor(s): Lori G Phillips-Young, Margaret M Strain
English - Independent Research

The Social Justice Sophomore Learning and Living Cohorts mission is to improve literacy in the Miami Valley. As a member of the cohort, I was trained to tutored adults by the non-profit organization Project READ. Project READ is a truly inspiring organization whose mission is to build skilled workers, strong families, and healthy communities. I was placed in an adult class in Kettering Ohio where students were from countries such as Mexico, Russia and Iraq. All of the students were learning English for the first time most of them knew very little to no English when they moved to the United States. Some students wanted to learn better English skills in order to find a job and others just wanted to be able to communicate with other English speakers. I worked as an assistant to Holly Elkins-Lopez, a full time Project Read teacher. I assisted her by giving students more individualized assistance. I was able to help the students sound out words, build vocabulary and understand grammar. I got the opportunity to learn and understand other people's culture through volunteering. I also connected this experience with the Marianist ideals of lead, learn, and serve by leading others in becoming literate in the English language, learning about other cultures and serving my community through tutoring. It was very rewarding to watch all the students make major progress in learning the English language.

It Takes a Community to Ensure Equality

Presenter(s): Mackenzie L Barron, Wei Guo, Rachel N Puslat
Advisor(s): Matthew D Archer, Meredith L Doench, William H Johnston, Monalisa M Mullins, Lori G Phillips-Young, Margaret M Strain
English - Course Project, 12_SP_ENG_102_B3

The Building Communities through Social Justice Learning and Living Cohort (BCSJLLC) strives to help students understand the importance of social justice and its impact on communities while providing students with opportunities to grow as leaders. Its primary mission is literacy and all BSCJLLC members performed service learning in the community by tutoring. All members of BSCJLLC were trained by the LLC's community partner Project READ to tutor students in K-8 and young adults. Project READ then placed us in tutoring positions at the Cleveland Elementary School and the Holy Angels Catholic Grade School. Rachel worked with third graders at the Cleveland school by helping them with their reading and vocabulary skills using a variety of strategies including flashcards. Wei and Mackenzie spent their time at Holy Angels Catholic Grade School and helped students with their reading and vocabulary skills as well as homework in other subjects. We felt our mission was to not only tutor but to be encouraging and demonstrate positive attitudes towards education. All of us enjoyed tutoring the students and we came to not only appreciate the opportunity to apply the Marianist principles of lead, learn, and serve but, we all learned that it takes everyone in a community to contribute towards the progress of bettering our nation.

Leadership and Service: A Social Justice Approach

Presenter(s): James H Hill, Corey L Juniewicz-Fogle, Andrew J Novak
Advisor(s): Matthew D Archer, Meredith L Doench, William H Johnston, Monalisa M Mullins, Lori G Phillips-Young, Margaret M Strain
English - Course Project, 12_SP_ENG_102_B1

The Building Communities through Social Justice Learning and Living Cohort (BCSJLLC) strives to help students understand the importance of social justice and its impact on communities while providing students with opportunities to grow as leaders. Its primary mission is literacy. In the fall of 2011 we participated in the first annual Book Buddy Program with the Cleveland Elementary School. Our spring semester project was to tutor students. All members of BSCJLLC were trained by the LLCâs community partner Project READ to tutor students in K-8 and young adults. Project READ then placed us in tutoring positions at Holy Angels School. The school is committed to helping their students grow in their faith life and in academics. We worked with students in grades from kindergarten through the fifth grade. We assisted students with the alphabet, reviewing vocabulary words, reading books of their choice out loud, reviewing math skills through flashcards and games. This experience has allowed us to form bonds with the children and staff. We believe that we have grown personally and professionally through our experience by being given the opportunity to apply the Marianist principles of lead, learn, and serve through the Social Justice Living and Learning Community.

Learning as a Way of Leading

Presenter(s): Amanda F Matney, Brooke M Smith, Margaret E Stemnock
Advisor(s): Matthew D Archer, Meredith L Doench, William H Johnston, Monalisa M Mullins, Lori G Phillips-Young, Margaret M Strain
English - Course Project, 12_SP_ENG_102_03

The Building Communities through Social Justice Learning and Living Cohort (BCSJLLC) strives to help students understand the importance of social justice and its impact on communities while providing students with opportunities to grow as leaders. The cohort integrates the Marianist ideals of learn, lead, and serve with service learning opportunities. This fall we participated in the first annual Book Buddy Program with the Cleveland Elementary School. Each member of the LLC provided a new book for a student in grades 4, 5, and special education. We also shared our own personal literacy story with our Book Buddy. All BSCJLLC members were trained by its community partner Project READ to tutor students in K-8 and young adults. Project READ then placed us in tutoring positions at Holy Angels, an elementary school, in the Dayton Early College Academy (DECA), a college preparatory high school, where we assisted students with improving their reading skills. The service learning experience provided a perfect blend of classroom knowledge and community service. Our cohort experience, training, and service learning assignments have resulted in a greater insight into the Marianist values of lead, learn, and serve and why service is strong component to building a just society.

Learning as a Way of Service

Presenter(s): Gabrielle M Gloekler
Advisor(s): Lori G Phillips-Young
English - Independent Research

The Sophomore Social Justice Service Learning Community(SSJSL)has a mission is to promote literacy. The SJSLC's community partner, the non-profit organization Project READ, trains volunteers to tutor students in grades K-8 and young adults. After receiving my training, I was assigned a tutoring position with a girl in second grade at Holy Angels. My work including helping her one-on-one with mathematics, spelling, and grammar skills in ways that would help her to better understand essential educational concepts in those subject. I appreciated being able to be a part of promoting literacy and helping the faculty with their afterschool program. Service learning is one way to learn as well as serve our community. It is also an opportunity to apply the Marianist ideals of lead, learn, and serve.

Learning by Serving Others

Presenter(s): Jill M Smith
Advisor(s): Lori G Phillips-Young
English - Independent Research

The Sophomore Social Justice Service Learning Community (SSJSL) has a mission is to promote literacy. The SJSLC's community partner, the non-profit organization Project READ, trains volunteers to help tutor students in grades K-8 and young adults and those students striving to learn English as a second language. After training, I was assigned an afterschool tutoring position with a first grade student named Elijah at the Westminster Presbyterian Church in downtown Dayton. Together, we would work on worksheets and workbooks that focused on spelling and reading. We focused on letter combinations and the sounds that they made. In order to make it easier and more enjoyable for him, I would let him practice on a dry erase board and draw pictures to help him remember. Elijah enjoys drawing so this was a good learning tool for him. On many afternoons his progress was evident because he was able to remember the majority of the words and sounds that we had reviewed during that session. If there was ever a time when he did not understand the concept, I would patiently explain it to him again but in a different way. For this reason, this was not only a good learning experience for him, but it also was a good experience for me because I was able to work on exhibiting patience and developing communication skills. In addition, it was also very rewarding for me to see how far he advanced throughout the time I spent with him. Service learning is one way to improve the literacy rates in our community. It was also an opportunity to help me apply the Marianist ideals of lead, learn, and serve to a real-life situation.

Observing Communication Practices in the Davis Center for Portfolio Management

Presenter(s): Jocelyn R Abron, George S Cressy, Gabrielle M Dimaio, Kevin O Martin
Advisor(s): Amanda J Wright Cron
English - Course Project, 12_SP_ENG_372_01

Evaluating the role that communication plays in an organization achieving its primary goals has been of interest to scholars over the past 30 years. Particularly, Doheny-Farina's (1986) Writing in an Emerging Organization discusses "how social and organizational contexts influence writing and how writing influences the organization"(p. 160). This study aims to observe communication and its roles in this professional academic atmosphere. The group will then develop a proposal to the organization to help them in their communication process. The group will collect written materials, observations of daily and special events, and audio recordings of both Davis Center meetings and interviews with Davis Center members. Written materials collected may include, but are not limited to, the following: center-wide issue-addressing emails from the management team or the Center director; team memos for general information; Center advertising materials meant for nonmember populations; and research reports pertaining to the primary function of the Davis Center's work. Nonintrusive observing of verbal communication among Davis Center members will be noted. Particularly, horizontal and vertical communication within the Center's hierarchy will be evaluated (Spinuzzi, 2007). Audio recordings of anonymous interviews of randomly selected Center members and Center management will be taken for later study. If permitted, audio recordings of full staff Center meetings and special team meetings will also be recorded for study.Expectantly, this study will come to fruition with some proposals for the Davis Center with regard to bettering their communication practices. This group expects to give concrete suggestions for more effective verbal and written communication.

11:00 AM to 12:30 PM

Project READ and Reading with Angels

Presenter(s): Jose C Panameno, Sadari S Phillips, Lindsay E Smore, William D Vanderslice
Advisor(s): Matthew D Archer, Meredith L Doench, William H Johnston, Monalisa M Mullins, Lori G Phillips-Young, Margaret M Strain
English - Course Project, 12_SP_ENG_102_B1

The Building Communities through Social Justice Learning and Living Cohort (BCSJLLC) strives to help students understand the importance of social justice and its impact on communities while providing students with opportunities to grow as leaders. The cohort integrates classroom education with service learning opportunities. This fall we participated in the first annual Book Buddy Program with the Cleveland Elementary School. Each member of the LLC donated a new book for a student in grades 4,5, and special education. All BSCJLLC members were trained by its community partner Project READ to tutor students in K-8 and young adults. Project READ then placed us in tutoring positions at Holy Angels, an elementary school. Holy Angels is a Catholic elementary school whose mission is to improve the faith of their students while also excelling in educational development. We worked one-on-one or with a small group of students in grade kindergarten through third grade with math facts, recognizing and writing the alphabet, flash cards, Dolch words, vocabulary/spelling words, writing complete sentences, and learning how to use money. The students of Holy Angels helped us to improve our communication skills and widen our thought process by giving us the opportunity to apply the Marianist ideals of lead, learn, and serve.

Service Learning Benefits the Student and the Tutor

Presenter(s): Zachary J Sheppard
Advisor(s): Lori G Phillips-Young, Margaret M Strain
English - Independent Research

The Sophomore Social Justice Service Learning Community's (SSJSL) mission is to promote literacy. The SJSLC's community partner, the non-profit organization Project READ, trains volunteers to help tutor students in grades K-8 and young adults. After my training, I was placed at the Immaculate Conception grade school, where I have been working with many students in English and Math. Most of the sessions have been one on one. My work with one particular student named Jacob has particularly impressed me with a greater understanding of the importance of service learning and the application of the Marianist ideals of lead, learn, and serve. This seemingly small contribution, small in the grand scheme of things, has helped reinforce my understanding of what it meant to be human. It showed me how we are always thirsting for knowledge, even at a young age, and when we gain the knowledge, we grow from it.

Service Learning: Giving Back to the Community While Learning

Presenter(s): Quinten J Murray, Kyle D Smith, Patrick L Thibodeaux
Advisor(s): Matthew D Archer, Meredith L Doench, William H Johnston, Monalisa M Mullins, Lori G Phillips-Young, Margaret M Strain
English - Course Project, 12_SP_ENG_102_B1

The Building Communities through Social Justice Learning Living Community (BCSJLLC) is based on the Marianist principles of linking scholarship, leadership, and service learning. The BCSJLLC's mission is to promote literacy. In the fall of 2011, the cohort participated in the first annual Book Buddy Program with Dayton's Cleveland Elementary School. Books were purchased and given to individual students in fourth and fifth grades and special education. The BCSJLLC's community partner, Project READ trained us to tutor students in grades K-8 and young adults in the fall in preparation for our service learning assignments. Working through Project Read, we were placed in the Cleveland Elementary School to help students with their literacy skills. The mission of the school is to provide a quality education by the standards set by the state of Ohio, while also promoting the development of well-rounded and healthy students. Our service experience included individual and group tutoring, assisting students with classroom projects, and helping teachers grade papers. We learned a great deal about the Dayton public school system and the community surrounding the University of Dayton campus from our relationships with the students and the school staff. Our service learning in the LLC has led to a greater understanding and appreciation of Catholic social justice tradition by applying the ideals of the Marianist tradition of lead,learn and serve.

Service Learning: The Importance of Civic Engagement

Presenter(s): Carson M Smith
Advisor(s): Lori G Phillips-Young
English - Independent Research

The Sophomore Social Justice Service Learning Community (SSJSL) has a mission is to promote literacy in the Greater Dayton/Miami Valley district. The SJSLC's community partner, the non-profit organization Project READ, trains volunteers to help tutor students in grades K-8 and young adults. After training, I was assigned a tutoring position with students at the Westminster Presbyterian Church in downtown Dayton. I have been working with a student named D'Angelo helping him with his math and reading skills. While he is currently in 7th grade, both his math and reading scores are not at a 7th grade level. We work one-on-one to improve his math and reading concepts. I have really enjoyed working with D'Angelo and developing a personal relationship with him as he had helped me to understand the struggles that he and many other urban students face at school. Service learning has allowed me to engage with younger students in our local community as well as to promote justice. It is a personal way to apply the Marianist ideals of lead, learn, and serve.

Teaching and Learning to Make a Difference

Presenter(s): Kathryn M Schilling, Lisa C VonDrasek, Katherine A Zikias
Advisor(s): Matthew D Archer, Meredith L Doench, Monalisa M Mullins, Lori G Phillips-Young, Margaret M Strain
English - Course Project, 12_SP_PHL_103_02

The Building Communities through Social Justice Learning and Living Cohort (BCSJLLC) helps students understand the importance of social justice and its impact on communities while providing students with opportunities to grow as leaders. Its primary mission is literacy and many BSCJLLC members tutored students in the community. Members were trained by our community partner, Project READ, to tutor students in K-8 and young adults. Project READ then placed us at the Dayton Early College Academy (DECA). DECA is adjacent to the University of Dayton and is focused on preparing students for college. We tutored three students in the seventh and eighth grade. In the course of our service, we learned how much difference one or two hours a week can in helping a student to pursue a higher education. Our service included helping students with the homework that is most difficult for them (usually math), and reiterating key concepts that the students had difficulty with. Those of us that tutored were pleased to learn that many of our students' grades were improved as a result of our relationships. Plunges at UD are are also a way of civic engagement. The Immigration and Refugee Plunge. sponsored by the Center for Social Concern, took place on March 24th, 2012. This experience allowed us to see and experience first-hand the problems associated with the immigration application process for those seeking to enter the United States. While on campus, we were shown documentaries about the immigration process and held discussions with immigrants who had direct experience immigrating into the US. The time we spent performing service in our community and learning about the ways we can impact legislation regarding the issues around immigration all reinforces our commitment to social justice and epitomizes and employs the Marianist ideals of lead, learn, and serve.

The Difference We Make is in the Doing

Presenter(s): Emily J Buroker, Kelly A Schlarman, Olivia A Wilcox
Advisor(s): Matthew D Archer, Meredith L Doench, William H Johnston, Monalisa M Mullins, Lori G Phillips-Young, Margaret M Strain
English - Course Project, 12_SP_ENG_102_B2

As active members of the Building Community through Social Justice Learning and Living Cohort, we are helping to build and improve the community we live in. Our cohort's mission is to promote literacy. The non-profit agency Project READ taught us special techniques for working with younger students in grades K-8. Some of these techniques were determining if the student is an auditory, visual, or kinesthetic learner. They also taught us how color can help a student learn better. We tutor in an after school tutoring program at the Holy Angels Elementary School. Our mission is to help improve the students vocabulary and reading ability. We encourage and support our students learning by assisting them with their reading skills. As we develop personal relationships with our students, we are able to encourage their learning by being positive role models. As tutors we do a variety of activities with the children to improve their reading. We use block letters to spell out different vocabulary words, we read back and forth with the students, we work through spelling books, and we employ flash cards with letter sounds on them to help them recognize

the alphabet quickly. The children really enjoy the hands-on activities. As Social Justice Students, we believe that all people in a society should be able to read and write. In our presentation we will reflect on how the combination of our service learning, the classes we have taken in our cohort, and our training by Project READ has helped us to understand and promote literacy in our local community. As UD students we will also explore the importance of our work in the context of the Marianist ideals of Lead, Learn and Serve.

Tutoring in the Dayton Public Schools: The Norms and the Disparities of Inner City Education. A Service Learning Project of the Sophomore Social Justice Cohort

Presenter(s): Amy M Keckler
Advisor(s): Lori G Phillips-Young, Margaret M Strain
English - Independent Research

As a member of the Sophomore Social Justice Learning and Living Cohort a part of our mission is to support, encourage, and facilitate literacy in the Miami Valley. My support of the program's goals was to tutor inner city children in Dayton's Cleveland Elementary School. After being trained to tutor reading by Project READ, I tutored 5 elementary school children for a total of 20 hours. During my experience I was able to apply what I have learned in my sociology and social work courses and to experience first-hand the normal practices and disparities in our educational system, especially focused on inner city education. My presentation will focus on those experiences and observations to highlight the Dayton education system's assests and successes as well as to reflect on those areas that still need great improvement.

Understanding Issues Facing Foreign Nationals Navigating the US Immigration Service

Presenter(s): Patrick Quinn
Advisor(s): Lori G Phillips-Young
English - Independent Research

The Sophomore Social Justice Learning and Living Cohort (SSJLLC)is an opportunity for students to get involved with many aspects of social justice whether it is at the local, regional, national, or global level. Immigration is one of the greatest challenges and highly contested issues facing our democracy today. There are several issues that confront the people wishing to immigrate to the United States. I personally explored these issues by participating in The Immigration and Refugee Plunge sponsored by the UD Center for Social Concern. This plunge was designed to give participants a better look at the process and the problems many foreign nationals face navigating the United States Immigration Service. I will be reflecting on the principles and practices of the system; the benefits of the current system; the negative aspects of the process; and, how maintaining the current system can impact immigration and our democracy.

Working Together for a Greater Tomorrow

Presenter(s): Sarah L Dickson, Brittany J Hornick, Anais M Nin
Advisor(s): Matthew D Archer, Meredith L Doench, William H Johnston, Monalisa M Mullins, Lori G Phillips-Young, Margaret M Strain
English - Course Project, 12_SP_ENG_102_B3

As members of the Building Communities through Social Justice Learning and Living Cohort (BCSJLC), we are committed to the ideal of improving literacy in the surrounding Miami Valley community. In November of 2011 our cohort participated in the Cleveland Elementary School Book Buddy Program where we donated books to students in grades four and five and also special education. We were trained by Project READ to tutor students in grades K-8 and also young adults. Then we were assigned students in the Dayton Early College Academy and the Dayton Public Schools. The Dayton Early College Academy (DECA) is a college preparatory school for inner city high school students. Through tutoring in various subjects and interacting with the students one-on-one we learned the true importance of education, literacy, and the value in helping others succeed. When we tutored our students we worked to develop relationships where we could discuss how educational success may be difficult at times but how hard work had paid off for us. Our overall goal is to empower students to become better readers and better thinkers by means of social justice. Through our work and watching the students achieve small successes and understanding, our experience epitomized the Marianist ideals of learn, lead, and serve. The experience of working one-on-one with selected students, granted us friendships and inspiration by the youth of Dayton.

You Are Never Too Old To Learn

Presenter(s): Erich R Beyer
Advisor(s): Lori G Phillips-Young, Margaret M Strain
English - Independent Research

The Sophomore Social Justice Learning and Living (SSJLLC) cohort has a twofold mission. The first is based on the Marianist principles of educating the person as a whole by integrating education with leadership and service. The program mission is to improve literacy in the Miami Valley and participating in activities that advance the cause of social justice. This year Project READ partnered with the SSJLLC and trained the sophomore cohort to tutor reading to students in grades K-8, young adults, and the not-so-young adults. I was assigned a 60-year old man who is studying to pass his GED. It was very interesting to tutor someone so much older than I and from such a different background than mine. Despite our age difference, we still connected and were able to relax around each other and learn from one another. The majority of the time I helped him with his reading comprehension, but I also helped him with his basic mathematics skills. This tutoring experience and our relationship has influenced my thinking on the importance of education in this country and how important and necessary it is to increase education opportunities for everyone regardless of geography, upbringing, or age. He showed me that no matter where we come from we all deserve the same amount of respect. Tutoring this man really heightened my awareness and importance of our Marianist values of lead, learn, and serve.

Eamon de Valera and the Rise of Fianna Fail

Presenter(s): Andrew W Carter
Advisor(s): Julius A Amin
History - Course Project, 12_SP_HST_486_P1

The early 1900's in Irish History was a time of great change. Eamon de Valera was the center to much of that change. With his insight and leadership, the idea of a self governing nation was becoming a reality. Leaving the political party SInn Fein, de Valera decided it was time for a new voice. This sparked the creation of the political party Fianna Fail and began a movement that has been prominent in Ireland since its creation.

Comparison of Numerical Methods for Analysis of the Diffusion of Soluble Proteins Through Sensory Cilia

Presenter(s): Nicholas D Haynes
Advisor(s): Muhammad Usman
Mathematics - Course Project, 11_FA_MTH_555_01

A recent paper in the Journal of General Physiology disproved the hypothesis that the ciliary axoneme and the basal bodies of cilia impose selective barriers to the movement of proteins into and out of the the cilium using a combination of numerical modeling and observation with confocal and multiphoton microscopy. We compare the accuracy and computational efficiency of the numerical method used in the paper, known as the method of lines, to another method, known as sinc collocation, and discuss the possible use of other methods for improving the algorithm.

Infectious Disease Mathematical Modeling of the 2001 Foot and Mouth Outbreak

Presenter(s): Michael W Ciesa
Advisor(s): Muhammad Usman
Mathematics - Course Project, 12_SP_MTH_445_01

This project is a mathematical analysis and computational study of the 2001 foot and mouth epidemic in the UK. This model includes an application of the SIR model, developed by W. O. Kermack and A. G. McKendrick, with two additional factors: vaccination and incubation period infectives. The incubation period infectives represent the population of individuals infected with the disease that do not show symptoms, but still have the possibility of infecting other individuals.

Mathematical Study of the Foot and Mouth Outbreak Model

Presenter(s): Jungmi Johnson
Advisor(s): Muhammad Usman
Mathematics - Course Project, 12_SP_MTH_445_01

The foot and mouth outbreak in the UK in 2001 was a disastrous event for the country and the economic. The disease did not only cost UK government so much money to stop the disease, but it also affected the tourism industry. Mathematical epidemic models can provide clear strategy for minimizing the effect of such a disease, determining the expected manner of its progression in the event of a future outbreak based upon the latest available data on the epidemic. This project is to explore how to minimize the cost, how to contain the disease in minimal time, and how realistic these models will be considering the limitation of the model. Numerical and qualitative tools such as MATLAB's built in ode solver will be used.

Numerical Study of a Mathematical Model of IL-2 Adoptive Immunotherapy on Patients with Metastatic Melanoma

Presenter(s): Alyssa C Lesko
Advisor(s): Muhammad Usman
Mathematics - Independent Research

IL-2 treatments have recently been identified to significantly reduce metastatic melanoma tumors and in some cases eliminate them. The problem with these treatments is that a set plan of administration varies from patient to patient and methods for determining treatment steps are still in the process of being developed. Previous research by Asad Usman and colleagues has used a numerical technique using MATLAB to decide treatment protocols. This research used the MATLAB's built in ode15 function to addresses treatment procedures including the starting and stopping of each treatment and the period in between each treatment. Building on this data and existing model, my project will explore several other numerical techniques such as ode23 and ode45 solvers, Euler's method, and the predictor corrector method to study IL-2 treatments in metastatic melanoma patients. A comparison will be made using error plots and tables, and a stability analysis using pplane7 will be investigated.

Qualitative Study of an SIR epidemic model with an asymptotically homogeneous transmission function

Presenter(s): Karoline E Hoffman
Advisor(s): Muhammad Usman
Mathematics - Course Project, 12_SP_MTH_445_01

I will be exploring and analyzing an SIR epidemic model. This particular model has an asymptotically homogeneous transmission function which means the transmission rate is proportional to the fraction of the number of infective individuals to the total population. I will also look at a qualitative analysis of the model and then discuss the implications of the results of the model.

Adopting a Policy of Sustainable Landscaping on UD's Campus

Presenter(s): Kevin M Sullivan
Advisor(s): Daniel C Fouke
Philosophy - Course Project, 11_FA_SEE_401_H1

The campus of the University of Dayton is one which is lacking in biodiversity and species richness. This was noticed by students in SEE 401 and targeted as a problem. In order to help restore biodiversity to the campus, four of the students drafted a proposal to the university on the importance of biodiversity on campus as well as on the earth. Much research was done concerning ecosystem services, human impact on the environment, invasive species, pollinators, and the benefits of native plants. After the research was conducted, it was concluded that the health of the campus, as well as the surrounding ecosystem, would benefit from focusing attention on restoring biodiversity, and that adopting a policy of planting native plants, as opposed to foreign plants, would be the best option. In addition to drafting a proposal on planting native plants, a pilot project was also formed, which was a direct plan to bring specific native plants to a specific area on campus. The exact location is a small wetland near Art Street on Frericks. Also, in addition to planting native plants, adopting sustainable landscaping practices, including "xeriscaping," was included in the proposal, as it goes hand in hand with helping the campus. The said proposal was submitted to the university Grounds Crew on 12/16/11.

Measuring Alpha-particle Charge to Mass Ratio using a Cloud Chamber

Presenter(s): Timothy T Gorman, Kevan A Kramb
Advisor(s): Mohamed Ahoujja, Rex L Berney
Physics - Course Project, 12_SP_PHY_431_01

A cloud chamber is a particle detector capable of detecting charged atomic particles, such as alpha and beta particles. These charged particles interact with a mixture of supersaturated isopropyl alcohol vapor and ionize it. The resulting ions act as condensation nuclei or cloud seeds, which form a cloud trail or mist in the wake of a particle. In the presence of a constant magnetic field, charged particles will bend according to the Lorentz force law. Depending on the curvature of the particles path, an experimental mass can be calculated. The constant magnetic field was achieved through a plexiglass board with like oriented neodymium button magnets. The supersaturated vapor was created through cooling isopropyl alcohol with dry ice. A radioactive lead-210 source was used to provide the alpha and beta particles measured.

Human Trafficking: An Explanation of Bonded Labor

Presenter(s): Lauren C Hirsch, Jane Littlefield
Advisor(s): Anthony N Talbott
Political Science - Course Project, 12_SP_POL_300_04

An estimated 27 million people are enslaved in the world today. Human trafficking, or the modern day slave trade, is the second largest criminal enterprise in the world and may be the greatest human rights challenge of our time. This poster presents an overview of modern day slavery along with an in depth look at one of the major types of human trafficking: Bonded Labor.

Human Trafficking: An Explanation of Child Sex Trafficking.

Presenter(s): Sean E Montgomery, Catherine M Shea
Advisor(s): Anthony N Talbott
Political Science - Course Project, 12_SP_POL_300_04

An estimated 27 million people are enslaved in the world today. Human trafficking, or the modern day slave trade, is the second largest criminal enterprise in the world and may be the greatest human rights challenge of our time. This poster presents an overview of modern day slavery along with an in depth look at one of the major types of human trafficking: child sex trafficking.

Human Trafficking: An Explanation of Child Soldiers

Presenter(s): Tyler J Eidson, Alexander J Ulintz
Advisor(s): Anthony N Talbott
Political Science - Course Project, 12_SP_POL_300_04

An estimated 27 million people are enslaved in the world today. Human trafficking, or the modern day slave trade, is the second largest criminal enterprise in the world and may be the greatest human rights challenge of our time. This poster presents an overview of modern day slavery along with an in depth look at one of the major types of human trafficking: child soldiers.

Human Trafficking: An Explanation of Debt Bondage among Migrant Laborers.

Presenter(s): Kevin T Erbs, Amon R Williams
Advisor(s): Anthony N Talbott
Political Science - Course Project, 12_SP_POL_300_04

An estimated 27 million people are enslaved in the world today. Human trafficking, or the modern day slave trade, is the second largest criminal enterprise in the world and may be the greatest human rights challenge of our time. This poster presents an overview of modern day slavery along with an in depth look at one of the major types of human trafficking: Debt Bondage among Migrant Laborers.

Human Trafficking: An Explanation of Forced Child Labor.

Presenter(s): Amy N Bush, Jamie A Leaver
Advisor(s): Anthony N Talbott
Political Science - Course Project, 12_SP_POL_300_04

An estimated 27 million people are enslaved in the world today. Human trafficking, or the modern day slave trade, is the second largest criminal enterprise in the world and may be the greatest human rights challenge of our time. This poster presents an overview of modern day slavery along with an in depth look at one of the major types of human trafficking: Forced Child Labor.

Human Trafficking: An Explanation of Forced Labor

Presenter(s): Erin N Brennan, Joshua R Dunleavy
Advisor(s): Anthony N Talbott
Political Science - Course Project, 12_SP_POL_300_04

An estimated 27 million people are enslaved in the world today. Human trafficking, or the modern day slave trade, is the second largest criminal enterprise in the world and may be the greatest human rights challenge of our time. This poster presents an overview of modern day slavery along with an in depth look at one of the major types of human trafficking: forced labor.

Human Trafficking: An Explanation of Involuntary Domestic Servitude.

Presenter(s): April L Velotta, Courtney E Wimsatt
Advisor(s): Anthony N Talbott
Political Science - Course Project, 12_SP_POL_300_04

An estimated 27 million people are enslaved in the world today. Human trafficking, or the modern day slave trade, is the second largest criminal enterprise in the world and may be the greatest human rights challenge of our time. This poster presents an overview of modern day slavery along with an in depth look at one of the major types of human trafficking: involuntary domestic servitude.

Human Trafficking: An Explanation of Sex Trafficking

Presenter(s): Amanda M Pipik, Christian L Sutphin
Advisor(s): Anthony N Talbott
Political Science - Course Project, 12_SP_POL_300_04

An estimated 27 million people are enslaved in the world today. Human trafficking, or the modern day slave trade, is the second largest criminal enterprise in the world and may be the greatest human rights challenge of our time. This poster presents an overview of modern day slavery along with an in depth look at one of the major types of human trafficking: sex trafficking.

Human Trafficking: Forced Agricultural Labor in the US

Presenter(s): Whitney J Leigh, Ryan J Singler
Advisor(s): Anthony N Talbott
Political Science - Course Project, 12_SP_POL_300_04

An estimated 27 million people are enslaved in the world today. Human trafficking, or the modern day slave trade, is the second largest criminal enterprise in the world and may be the greatest human rights challenge of our time. This poster presents an in depth look at forced labor in the US agriculture industry.

Uncovering Identity: Portraits of Dayton

Presenter(s): Kelsey B Biggar
Advisor(s): Judith L Huacuja

Visual Arts - Course Project, 12_SP_VAH_485_N1

Amanda Jasnowski, a sophomore photography major at Sinclair College in Dayton, Ohio, grapples with the concept of identity. Although originally from Spain, Jasnowski spent her formative years in Dayton developing skills as a portrait photographer. According to her personal website, amandajas.com, she says, "I photograph in an attempt to reach out to others and to unravel my mind to the public, to visually stimulate others. I want to remember things that words cannot cover." Her work portrays strong themes of identity, separation and displacement through the use light, materials that cover up faces and an innate relationship with nature. A promotional brochure will be created with a series of articles that will discuss these themes as they relate to Jasnowski's life, as well as contextualize her within art history. Additionally, it will include examples of her and similar photographer's works. There are many great artists outside of our University of Dayton community, and students and faculty need to be made aware of this. The goal of my poster project is to expose Jasnowski as a unique and promising portrait photographer just minutes away from the UD campus.

SCHOOL OF BUSINESS ADMINISTRATION

S&P Valuation Modeling: An Empirical Analysis 1999-2011

Presenter(s): Matthew J Buse
Advisor(s): Robert D Dean

Economics and Finance - Course Project, 11_FA_FIN_498_P1

The purpose of this study is to develop and evaluate a quantitative approach to S&P 500 sector weighting based on relative valuation measures for four factors: earnings, valuation, profitability, and safety or risk. The returns to the sectors based on relative valuation weights are compared to S&P 500 returns over the period 1999-2011 to determine if excess returns are generated.

SCHOOL OF EDUCATION AND ALLIED PROFESSIONS

Syntheses of Research on Differences Across Schools and Classrooms

Presenter(s): Libby M Durnwald, Annemarie Fisher, Carissa A Madderom, Emily L Mobley, Laura M Tighe
Advisor(s): Susan M Ferguson, Kathryn A Kinnucan-Welsch
Center for Catholic Education - Course Project, 12_SP_EDT_110_H1

Presentations will synthesize current research and thought on a variety of topics related to differences across schools and classrooms.

Syntheses of Research on Extracurricular Activities in p - 12 Schools

Presenter(s): Katherine E Penny, Samantha N Potocek
Advisor(s): Susan M Ferguson, Kathryn A Kinnucan-Welsch
Center for Catholic Education - Course Project, 12_SP_EDT_110_H1

Presentations will synthesize current research and thought on a variety of topics related to extracurricular activities in p - 12 schools.

Syntheses of Research on Gender Segregation in Schools

Presenter(s): Magdalene L Egan, Emily F Hoelter, Abigail E Kindt, Kelly M Kraus
Advisor(s): Susan M Ferguson, Kathryn A Kinnucan-Welsch
Center for Catholic Education - Course Project, 12_SP_EDT_110_H1

Presentations will synthesize current research and thought on a variety of topics related to gender segregation in schools.

Syntheses of Research on Inclusion and Students with Disabilities

Presenter(s): Tara M Barboza, Carla M Knapke, Taylor M Parks, Mary Patricia E Savord, Bethany L Vannoy
Advisor(s): Susan M Ferguson, Kathryn A Kinnucan-Welsch
Center for Catholic Education - Course Project, 12_SP_EDT_110_H1

Presentations will synthesize current research and thought on a variety of topics related to inclusion and students with disabilities.

Social Justice and the Black - White Achievement Gap

Presenter(s): Rehab N Abumansour, Reem B Al-Hajri, Sami G Alsulami, Matthew A Brubaker, Brian R Connor, Mark Gumm, Laura A Inkrott, Patrick Wanderi Kagai, Nathan Keel, Katelin McKinley, Olfat Ruzzah
Advisor(s): Carolyn S Ridenour, Pamela R Young
Educational Leadership - Course Project, 11_FA_EDA_556_01

The black-white achievement gap has challenged educators in the United States over many decades. Not only are some students disenfranchised by an educational system designed for all citizens, but the racial divide presents an unrelenting social justice failure. Test score data from the National Assessment for Educational Progress (NAEP) has been recorded for students aged 9, 13, and 17 from the late 1970s forward. While results showed some narrowing of the gap in 2007 compared with prior years, the gap continues to persist. During Fall semester 2011, eleven Educational Leadership graduate students (in EDA556 Leadership in Diverse Communities) studied the achievement gap by reviewing the statistical profiles in the NAEP data for specific ages in reading and math. They studied the strategies revealed in the metaanalysis of Ronald Ferguson, a Harvard professor and national leader in identifying strategies to ameliorate barriers to closing the gap. Students individually developed plans to become advocates for making the black-white achievement gap a priority in their work as aspiring school leaders with commitments to social justice. In this Stander Symposium 2012 poster presentation, students and their professors show the aggregated dimensions of those ideas. The poster displays evidence-based themes that could drive serious efforts by school leaders to take on the injustices that continue to plague the schools led by those in the professional roles to which these graduate students aspire.

A Symbolic Interactive Analysis of Pre-Medical Students Field Experience in Orthopedic Surgery and Athletic Training

Presenter(s): Kyle P McGrail, Joseph G Roberts
Advisor(s): George M DeMarco, Steven C Foster
Health and Sport Science - Course Project, 12_SP_HSS_455_P1

The purpose of this study was to describe and interpret the experience of two 2nd year premedical students' field-based work under the direction of prominent practicing Dayton orthopedic surgeons and the University of Dayton Head Athletic Trainer. Across a semester long immersion, students shadowed, observed, and assisted the surgeons and athletic trainer during 25 separate sessions, which included treatment of patients and athletes in physicians' offices, hospital operating rooms, and the UD athletic training center. Through a symbolic-interactive lens based on Blumer classic (1969) work, Symbolic Interactionism: Perspective and Method, students field notes, professional journals, and oral/written feedback provided by supervising surgeons, physicians' assistants, athletic trainer, and UD faculty were subject to content analysis via the constant comparative method. Emergent themes will describe how - in the spirit of Blumer- (a) students knowledge, attitudes, perceptions of orthopedics and athletic training evolved cyclically throughout the field experience, (b) were profoundly influenced by the physicians and athletic trainer, and how (c) the students themselves in reciprocity, acted to influence their mentors and the environments in which their work was performed. Of value to students in all disciplines, the findings of this study will underscore the importance of early career field experience in professional preparation.

Career Opportunities in the Health and Sports Science Department

Presenter(s): Kimberly M Ely, Michelle L Lamusga, Sara M Pardi, Allison A Scholtes
Advisor(s): Marvin D Ganote
Health and Sport Science - Course Project, 12_SP_HSS_226_02

The Health and Sports Science department combines a wide spectrum of majors within it ranging from Pre-Physical Therapy to Dietetics. Within these majors there is an ever greater amount of career opportunities after graduation. Three of the careers that are in a large demand right now are Physical Therapists (PT), Dietitians, and Physician's Assistants (PA). In this display we are going to expand further into these careers by looking at four different professions: a Pediatric PT, an Orthopedic PT, a Registered Dietitian, and a Surgical PA.

Career Outlook: Future Jobs in Physical Therapy, Occupational Therapy, and Personal Training

Presenter(s): Carla J Becker, Kathleen E Fusco, Annie L Wittenberg, Sarah M Zengel
Advisor(s): Marvin D Ganote
Health and Sport Science - Course Project, 12_SP_HSS_226_02

The purpose of this research is to focus on the future outlook of careers in the Health and Sports Science field. These careers include physical therapy, occupational therapy, and personal training. This presentation will display the pros and cons of these career paths for the next ten years. We will give insight as to how these careers will impact society as well as the need for health professions in the near future.

How the Future Looks for Your First Career Job

Presenter(s): Rachel Jones, Richard T McLoughlin, Jackson Pennie
Advisor(s): Marvin D Ganote
Health and Sport Science - Course Project, 12_SP_HSS_226_01

Our group purpose is to research and display what the future will look like for a strength and conditioning coach, a personal trainer, and a entrepreneur in fitness 10 years from now. Our goal is to research each career field and determine where it will be 10 years down the road. We want to answer questions such as will that career be successful, will that career still have the same meaning 10 years in the future, what kind of education will be needed to make those careers a reality? Our research results will be displayed on a poster board.

Job Outlooks for Various Occupations Within the Health and Sport Science Field

Presenter(s): Ashley C Fecher, Jessica E Koney, Ryan C Lyn
Advisor(s): Marvin D Ganote
Health and Sport Science - Course Project, 12_SP_HSS_226_02

Ashley Fecher decided to research the job outlook of an occupational therapist. Roles for this occupation include working with a client to achieve proper health, prevent injuries and help the client succeed in all everyday life activities. Occupational therapists can work with individuals of any age who are mentally, physically, developmentally or socially disabled. Ashley Fecher chose this occupation because it is in high demand, makes good money, and is a very hands-on, hardworking job that helps a variety of different people live their lives to the fullest.Jess Koney decided to research the job outlook for a Physical Therapist. The job of a Physical Therapist consists of creating rehabilitation plans for patients, keeping records for doctors, and helping those patients through the rehabilitations process, based upon their impairment. Jess chose this future occupation for herself because it is something that she has been looking at for the past couple years as a career path and wants to know all that she can about it, along with the fact that it is different from the normal desk job. It is patient oriented, hands-on, and an extremely rewarding career.Ryan Lyn decided to research the job outlook for an Athletic Therapist. Their job consists of rehabilitation of athletes, paperwork for doctorâs records, basic bodily maintenance for athletes (i.e. taping ankles, etc.), preliminary evaluations for doctors, and various other aspects. Ryan decided to choose this possible occupation for himself because it was an interesting job that includes hands-on activities every day.

Opportunities and Future Career Goals For Our Immediate Career Positions

Presenter(s): Amber M Beavers, Christina A Bortolotti, David E Reed, Kelsey L Rodgers
Advisor(s): Marvin D Ganote
Health and Sport Science - Course Project, 12_SP_HSS_226_01

Our presentation will display our career based objectives from the times we graduate until ten year into our future career. We will be presenting a poster as well as a double sided brochure to display our individual research about our particular career fields. These displays will show what the future will be like 2 -5 years from now when we get our first career position. We will include in our display a major impacting technology for the particular job. We will each be using a current open job position and use it as the source for our research and presentations. The presentations will include the career positions of a clinical nutritionist, sports therapist, athletic trainer, and physical therapist.

Positions in Health and Sport Science

Presenter(s): Sunni N Clyse, Melissa C Dewitt, Josie M Little
Advisor(s): Lloyd L Laubach
Health and Sport Science - Course Project, 12_SP_HSS_226_01

A Health and Sport Science based research project examining job opportunities following graduation. The project examines work as an occupational therapist and physical therapist. It highlights three key aspects of the position and technology involved in the positions.

The Effectiveness of a Personalized Peer Physical Education Program (PPPEP) on the Health Related Physical Fitness and Diets of Selected College Age Students

Presenter(s):
Advisor(s): George M DeMarco
Health and Sport Science - Course Project, 12_SP_HSS_428_01

The purpose of this major course research project is to determine the effectiveness of a Personalized-Peer Physical-Education Program (PPPEP) on the cardiovascular endurance, muscular strength/ endurance, flexibility, body composition, and diet of selected college age students (i.e., components of health related physical fitness, HRPF). During the 2012 spring Semester, students in two sections of a university level research methods course will exercise w/peers during eight (8) separate sessions. Two (2) additional sessions will be allocated for pre- and post-testing. All exercise and testing sessions will be conducted at the university's student fitness-activity center and/or outdoor recreational facility.Divided into 10 separate teams and 4 separate conferences, students will engage in an array of specialized exercises in progressive resistance training, cardiovascular endurance, flexibility and play activities at varying intensities. A quasi-experimental mixed-method research design will be utilized. Quantitative

measures will include the President's Challenge Adult Physical Fitness Test (PCPFN, 2012) and Borg Critical Rating (CR10, Borg, 1998). SuperTracker at ChooseMyPlate.gov (USDA, 2012) will be utilized to monitor students' caloric intake throughout the course of the study. Utilizing SPSS v19, descriptive/inferential statistics will be calculated at the .05 level of significance. Sources of qualitative data will include (a) interviews/ questionnaires focusing on students' personal-family exercise-medical history and (b) fitness journals-nutritional logs. Qualitative data will be subject to content analysis via the theoretical/analytical framework of Symbolic Interactionism (Blumer, 1969). Emergent common perspectives, themes, and categories will be developed into Grounded Theory (Glaser & Strauss, 1967) describing students' attitudes toward- and engagement in- exercise and diet. Case histories will be constructed and all measures of pre- and posttest data will be compared to determine the effectiveness of the PPPEP on students' HRPF and diet. It is hypothesized that all measures of students HRPF/diet will improve as a result of participation in the PPPEP.

The History of Physical Education-Activity and Sport: Stories for the Ages and Lessons from the Legends of Memorable Moments, Events, Trends, Tales, Phenomena, and Famous Women and Men:Their Teams and Times - Semester VI

Presenter(s):
Advisor(s): George M DeMarco
Health and Sport Science - Course Project, 12_SP_HSS_275_01

The purpose of these studies was to describe and interpret major events, trends, phenomenon, and the lives and times of significant individuals in the history of sport and physical education-activity throughout the millenia. At once interesting, inspirational, edifying, and enlightening, the stories told by the students of the course HSS 275 - History of Physical Education/Activity and Sport - speak powerfully to the transcendent nature of sport and physical activity across all generations, cultures, and topical interests. From the lives of Jack LaLanne, the Godfather of Fitness; to Babe Didrikson Zaharias, arguably the greatest female athlete of all time; to Baseball's Steroid Era, to the History of Prosthetics, these original research projects utilized an array of primary and secondary sources, including interviews, personal narrative, documents, print media, photographs, artifacts, and vintage video to bring alive the past to teach anew life's lessons from which all may learn.

The Projected Future of Various Careers in the Health Field for the Next 10 Years - Includes Personal Training, Occupational Therapy, Pediatric Physical Therapy, and Orthopedic Physical Therapy

Presenter(s): James M Foley, Olivia N Glavac, Joseph M Lucido, Karalyn M Scott
Advisor(s): Marvin D Ganote
Health and Sport Science - Course Project, 12_SP_HSS_226_01

There are many potential jobs available in the health field, and many have hopeful outlooks for the future. A few options in the health field consist of personal training, occupational therapy, pediatric physical therapy, and orthopedic physical therapy. Personal training is a booming job industry that instructs people on how the body works and how people can be fit. Sometimes though, due to various events and disease, the body may become weak, and therapy is needed. Occupational therapy is another growing health career that helps people regain motor skills, reasoning, and independence. Orthopedic and sports physical therapy can be extremely useful to reduce pain and help with recovery from surgery. Pediatric physical therapy is used to help children with various injuries and muscle disorders. All of these different types of therapy have a potential to improve greatly with different types of technology, such robotic treatment and Wii games. Overall, the future of these types of therapy is promising.

The Uses and Benefits of TRX Training

Presenter(s): Jennifer G Higley
Advisor(s): Janine T Baer
Health and Sport Science - Course Project, 11_FA_HSS_490_P1

My Standard Symposium describes the uses and positive results of TRX training. TRX is a type of suspension training developed by the Navy SEALs. The suspension training is a different type of workout because it builds strength while simultaneously improving flexibility, balance, and core stability. As a part of my internship I became TRX Certified through a training course in the summer of 2011. Fortunately, as a personal trainer at the Recplex, I had the opportunity to train my clients using TRX. I have provided results in the form of both client input on the TRX training and data

on changes in clientâs body composition. Even though the TRX training is challenging, my clients have found it to be a very useful form of strength training. These sentiments can be backed up by positive body composition changes; as the women became tone and lost weight, while the men gained strength and muscle mass. Data will be provided showing the improvements made in body composition. I will introduce this relatively new type of training, while simultaneously demonstrating its positive benefits.

This display is about these career fields projected 10 years into the future: Exercise Physiology, Athletic Training, Occupational Therapy and Physical Therapy

Presenter(s): Annie H Allen, Kevin M Bogenschutz, Samantha M Dresmann, Nicole M Sarkisian
Advisor(s): Marvin D Ganote
Health and Sport Science - Course Project, 12_SP_HSS_226_01

Occupational TherapyI am going to research what an occupational therapists' everyday job life is. I will also find what the salaries are; starting, average and projected. I will also research the perquisites that one must have to become a successful occupational therapist. I am interested in looking into what their job entails. I will look into what types of jobs are available as well as the employment projection for when I will be entering the field. Athletic TrainingI am going to research what the job of an athletic trainer entails and how to obtain a career in the athletic training field. I will research the average salary starting out and down the road in your career. I will figure out the exact requirement that it takes to become an athletic trainer and the their everyday job. I will find out what jobs are available to someone with this degree and what elements athletic training mainly works on.Exercise PhysiologyI will research what the job entails and where a person is to go with this career. I will find out the average salary of an exercise physiologist and what requirements that one must have to become one. I will research what jobs are available, and also if this career is based more on training, prevention, or rehabilitation.Physical TherapyI am going to research what an average day is like for a physical therapist. It will also be important to research the projected growth for this field in order to find out the job opportunities. In addition I will need to discover what interests are needed and other experiences to become a physical therapist. It will be interesting to learn the new technology that is constantly being updated in this career field.

Communication and Students with Autism

Presenter(s): Meghan C Henry
Advisor(s): Patricia M Hart
Teacher Education - Course Project, 11_FA_EDT_340_02

One of the defining characteristics of the Autism Spectrum Disorders is deficits in the development of communication skills. Children with autism can be nonverbal, be verbal but struggle with speech, and also have deficits in auditory processing. These developmental deficits not only make communication difficult for children with autism, they also make communication stressful. This paper describes the most common communication problems children with autism must deal with in school and life in general, and describes actions that educators can take in classrooms to enhance the learning of students with autism and make them more able to learn. When educators are more aware of the communication abilities of the students with autism that spend time in their classroom they will be better able to instruct these students in academic content areas. More importantly, they will be better prepared to understand each individual student and help him or her learn how to communicate with others more effectively.

Defining Giftedness: Explaining Criteria, Models and Impact of Teachers on Gifted Education

Presenter(s): Molly J Becker
Advisor(s): Patricia M Hart
Teacher Education - Course Project, 11_FA_EDT_110_P2

Knowing how to identify gifted students is a challenge that all teachers will face and this identification can shape a childâs future. According to the OSTP Standards (2005), Standard 1 states that teachers need to be able to ârecognize characteristics of gifted students, students with disabilities and at-risk students in order to assist in appropriate identification, instruction and interventionâ (p. 15). This paper delves deeper into the topic of gifted education in order to better inform future educators of the definitions of giftedness, the criteria used to identify gifted students, the different models of gifted education, and the impact of teachers on gifted students. By providing a broad base of knowledge in gifted education, the

hope is that future teachers will be able to effectively identify gifted students within their classroom and better serve them. This paper explains there are many different definitions of giftedness, encompassing not only academic ability, but also creativity, task commitment, and leadership potential. Identification processes are shifting and future educators need to be prepared to identify students not purely in an academic sense, but in a multifaceted way.

Effective Instructional Strategies For Use with Upper-Grade Level Struggling Readers

Presenter(s): Claire M Shaw
Advisor(s): Patricia M Hart
Teacher Education - Course Project, 12_SP_EDT_498_H1

This presentation will focus on struggling readers in upper level grades (9th through 12th). Most reading programs and research focus on literacy issues in elementary school. In many cases, reading instruction often ceases after eighth grade. After this point, teachers expect students to have a certain level of reading skill. Because of this, many students who struggle with reading will be mislabeled as having a learning disability.Unfortunately, recent studies have shown that a quarter of eighth-grade students perform below the "Basic" level of reading proficiency (Allington). Studies have also suggested that up to 70% of older readers are in need of remediation but do not receive it (Whithear). Because they lack reading skills, students cannot perform well in other classes, even in subjects like math and science where they may be capable of grasping the concept but cannot read the assignments or questions. Struggling readers cannot keep up with increasingly advanced language, and often drop out in high school and become adults without proficient reading skills.The focus for the Stander presentation will be on Chapter 2, the Review of the Literature for this research study. The review will focus on articles about struggling readers in urban and high-poverty schools. It will also focus on the most effective strategies teachers can employ to help students become proficient readers. Evidence based strategies that have been identified as effective will be examined. The impact of implementing these strategies in schools will be an outgrowth of the study. BibliograhyAllington, R.L. (2011). Reading intervention in the middle grades. Voices from the Middle, 19(2), 10-16.Whithear, J. (2011). A review of fluency research and practices for struggling readers in secondary school. Literacy Learning: The Middle Years, 19(1), 18-28.

English Language Learners

Presenter(s): Maria C Roth
Advisor(s): Patricia M Hart
Teacher Education - Course Project, 11_FA_EDT_110_P1

Current research shows that the number of English Language Learners in America is steadily increasing. This paper explains some approaches that are effective in teaching English Language Learners. These approaches include teachers using visual aids in their lesson plans, integrating their home cultures into their class, being patient with them, and work with them outside of class. This paper includes aspects from each approach in great detail. All of these approaches contribute to the success of English Language Learners in the classroom.What is the best approach for teaching English Language Learners?

Highly Effective Teaching Strategies That Impact Low Achieving Mathematics Classrooms

Presenter(s): Erin M Yacovoni
Advisor(s): Patricia M Hart
Teacher Education - Course Project, 12_SP_EDT_498_H1

This research study will look at the importance of teachers using particular instructional strategies and their impact on student learning, within a low achieving high poverty mathematics classroom. Dr. Deborah Ball, the dean of the School of Education at the University of Michigan, uses the term "high-leverage practices". This term is defined as "those practices at the heart of the work of teaching that are most likely to affect student learning" (Ball, 2010/2011). The study would include looking at these terms used for these practices, and reviewing the effectiveness of these practices. In looking at the ways teachers instruct their classroom, the study will review the literature on the professional development of preservice and inservice teachers in learning these strategies. The study will examine the emphasis made during the professional development of teachers on the connection between instructional practices and student learning. This research may result in teachers being encouraged to use these research based methods in their classrooms. The achievement gap will be considered as part of this research study.Bibliography:Ball, D. L. (2010/ 2011). Teaching skillful teaching. The Effective Educator, 68(4), 40-45.

Improving Teacher Preparation to Enhance Academic Achievement of English Language Learners

Presenter(s): Carol A Harper
Advisor(s): Patricia M Hart
Teacher Education - Course Project, 12_SP_EDT_498_H1

This project explores the existing imbalance that exists between teacher preparation and the rising number of English Langauge Learners (ELL) in American classrooms. Teachers views on their own feelings of preparedness or lack thereof will be examined with respect to their levels of experiences and self-efficacy. Aspects of current teacher preparation programs will be evaluated to the extent of the scope of their effectiveness. The conceptual framework established in the 2009 Issue Paper from the National Comprehensive Center for Teacher Quality for preparing teachers of English Language Learners identifies five important elements of teaching these students. These categories include the sociocultural and political foundations for teaching ELL, the foundations of Second-Language acquisition, knowledge for teaching academic content to ELL, effective instructional practices for teaching academic content to ELL, and assessment practices and accommodations for ELL. This paper will explore the research in each one of these categories, and will use that framework as a method of organization for the study that was conducted from the fall of 2011 to the fall of 2012. As a part of the methodology of the study, teacher questions about teaching ELL students were identified and organized according to the framework. The results will influence recommendation for current and future teacher preparation programs. Keywords: English Language Learners, self-efficacy, teacher preparation

Preventing Bullying: What Can Educators Do?

Presenter(s): Davina McLaughlin
Advisor(s): Patricia M Hart
Teacher Education - Course Project, 11_FA_EDT_110_P2

Bullying has become an epidemic that is sweeping the nation, touching public schools everywhere. This paper provides definitions and background information on bullying, as well as signs that will aid in recognizing both a bully and a victim within the classroom. Emerging research is finding that children with disabilities or special needs are more susceptible to bullying due to their often visible and frequently misunderstood differences. Bullying should be approached from a preventative position instead of the current reactive stance. Educators can choose to take an active role and help students cope with bullying in constructive, healthy ways. This paper offers new alternatives for teachers to utilize in their schools in an effort to prevent bullying and create an overall positive atmosphere.

Review of Relevant Literature: Developing Social Consciousness through Young Adult Literature

Presenter(s): Megan R Abbate
Advisor(s): Patricia M Hart
Teacher Education - Course Project, 12_SP_EDT_498_H1

This project consists of a Review of the Literature as a preliminary component of a developing Honors thesis regarding young adult literature. In their formative years, American children and teens often encounter and even incorporate ethnocentric biases into their ways of thinking. Some young adult fiction can reinforce these ideas. The aim of this research project is to present readings in which young adult literature can foster a more global and open-minded outlook which will allow young adults to recognize commonalities, overlook differences, and promote tolerance. At the same time, the researcher intends to consider the way notions of globalism interact with notions of universalism, and how young adult literature contributes to this conversation. This study will contribute to the larger body of scholarship as it questions some notions of American ethnocentrism in order to consider a more culturally relative outlook; at the same time, it will explore the way assertions such as universal human rights function in conjunction with notions of relativity. This thesis will demonstrate ways in which young adult literature can affect social change through both a recognition of commonalities and respect for differences. The objective of the preliminary Review of Literature will be to gather other scholarship in this arena, study, compare, contrast, and synthesize it, and position the new research within the larger body of existing scholarship.

Social Integration and Implementation in the Classroom

Presenter(s): Amy M Sullivan
Advisor(s): Patricia M Hart
Teacher Education - Course Project, 11_FA_EDT_340_02

Social learning and interaction in regards to students with disabilities, is a crucial aspect towards creating full integration in the classroom. Social integration is a term used to describe "a student's full participation in the social interactions of the school community, including their acceptance by others as an integral part of the school's social network" (Webster and Carter, 2007, p. 200). Not only students with disabilities, but general education students as well, will benefit from social interactions. Friendships are important and the impact it has helps to redefine social skills, creates support systems, and helps students to learn values (Carter and Hughes, 2005). It is important to find ways to incorporate social interactions into the classroom, so that students with disabilities feel more comfortable and can improve on their social skills.

Study Abroad for Prospective Teachers

Presenter(s): Emily F Powers
Advisor(s): Patricia M Hart
Teacher Education - Course Project, 11_FA_EDT_110_P2

Teacher education students often lack the cultural education and international exposure they need to effectively teach when they graduate and have classrooms of their own. Cultural awareness and adaptability to diversity are very important skills for teachers to have. However, research shows that prospective teachers do not have and do not receive the international education that is necessary for them to teach effectively. Study abroad is an excellent way for prospective teachers to gain international experience and knowledge for their profession as educators. "Gaining the knowledge, skills, and attitudes through an international experience is no longer just the interest of individual students. It has now become a priority of the collective" (Lewin, 2009). Study abroad can have significant impact on prospective educators as well as global citizens. As the United States becomes more diverse, it is important that educators are able to relate and identify with their diverse students. Unfortunately, teacher education students do not have ample opportunity to study abroad. Teacher education students that do study abroad, however, benefit tremendously in that they are impacted both personally and professionally. Although many teacher education students do not get the chance to study abroad, it is an extremely effective means to gain cultural awareness and thus become better educators to their diverse students.

Syntheses of Research on Evaluation of p - 12 Teachers

Presenter(s): Emily N Ferguson, Stephanie M Lutz, Sarah E Sercu, Daniel S Zillich
Advisor(s): Susan M Ferguson, Kathryn A Kinnucan-Welsch
Teacher Education - Course Project, 12_SP_EDT_110_H1

Presentations will synthesize current research and thought on a variety of topics related to p - 12 teacher evaluation.

Syntheses of Research on Factors Related to p - 12 Student Achievement

Presenter(s): Tori R Kistner, Brigid R Kovach, Hannah A Schmidt, Conor W Squier
Advisor(s): Susan M Ferguson, Kathryn A Kinnucan-Welsch
Teacher Education - Course Project, 12_SP_EDT_110_H1

Presentations will synthesize current research and thought on a variety of topics related to p - 12 student achievement.

Syntheses of Research on School Curriculum

Presenter(s): Kathryn C Auletto, Alexandra R Brizzi, Laura A Donohue, Gabrielle M Mattes
Advisor(s): Susan M Ferguson, Kathryn A Kinnucan-Welsch
Teacher Education - Course Project, 12_SP_EDT_110_H1

Presentations will synthesize current research and thought on a variety of topics related to p - 12 school curriculum.

Syntheses of Research on School Policy and the Rights of Individuals

Presenter(s): Michele M McDonald, Nicole E Price, Catherine A Scholtes
Advisor(s): Susan M Ferguson, Kathryn A Kinnucan-Welsch
Teacher Education - Course Project, 12_SP_EDT_110_H1

Presentations will synthesize current research and thought on a variety of topics related to school policy and the rights of individuals.

Syntheses of Research on Technology and Schools

Presenter(s): Amy E Fox, Megan E Sullivan, Alexander A Wade
Advisor(s): Susan M Ferguson, Kathryn A Kinnucan-Welsch
Teacher Education - Course Project, 12_SP_EDT_110_H1

Presentations will synthesize current research and thought on a variety of topics related to technology in schools.

Teaching Strategies, Methods, and Procedures for English Language Learners in Early Childhood Education

Presenter(s): Ashley E Stoetzel
Advisor(s): Patricia M Hart
Teacher Education - Course Project, 12_SP_EDT_498_H1

With a dramatic growth in the number of children who are learning English as a second language in the United States, it is important for teachers to know strategies that allow these English language learners (ELLs) to participate in the classroom experiences and continue to develop and learn at an appropriate rate. This project examines the instructional strategies, methods, and procedures used with children in an early childhood setting who have a primary language other than English in the home. A qualitative and quantitative analysis of published, peer-reviewed studies and articles on ELL will be included in this study. Some of the researched methods used in early childhood settings have been validated whereas others only appear to work on a case-by-case basis. The project will include the evidence based methods effectively used in early childhood settings with ELLs.

The Impact of Racial, Ethnic, and Socioeconomic Differences on Autism Identification and Treatment

Presenter(s): Madie K Szaller
Advisor(s): Patricia M Hart
Teacher Education - Course Project, 12_SP_EDT_498_H1

As the prevalence of autism has increased in recent years, researchers are searching for answers to explain this drastic rise in diagnoses. While studying various ethnic, racial, and socioeconomic demographics to determine a cause for this complex disorder, researchers have found alarming differences in identification timing and treatment options presented to upper class, minority, and low-income families. Although previous research studies provide evidence of treatment disparities, currently there are no conclusive findings that explain why these disparities exist. Therefore, this study aims to draw attention to the differences in the timing of diagnoses, service options, and advocacy support available to predominantly white middle to upper class families, minority families, and low-income families. Additionally, this study serves as an effort to consider physician perspectives, insurance policies, and parental education levels as possible reasons for identification and treatment disparities. Diagnosis and treatment differences must be identified and fully understood before they can be effectively changed. Although this research is only one piece of the larger discussion concerning autism diagnosis and treatment, it will hopefully help to determine the steps necessary to provide valuable treatment to all children with autism, regardless of ethnicity, race, or socioeconomic status.

SCHOOL OF ENGINEERING

Model Home Project

Presenter(s): William D Wehner
Advisor(s): Malcolm W Daniels
Electrical and Computer Engineering - Course Project, 12_SP_EGR_330_P3

In 2000, the United Nations agreed upon the Millennium Development Goals (MDG). The goals outlined a series of goals in order to eliminate poverty in the world. Since the goals were developed, governments and non-government organizations have pushed to serve underdeveloped countries. Honduras is a underdeveloped country that organizations and governments have been pushing to help achieve the MDG's. The Model Home Project is an effort to design and build a low cost house that can serve as a living residence or business space. In order to achieve design goals, the house must be low cost, built from local materials, and incorporate multiple appropriate technologies. The technologies that could be incorporated include, biosand filters, rocket stove, rainwater catchment, and drip filters. Through the ETHOS program, a team will be sent down in May to build the house in Honduras.

STUDENT DEVELOPMENT

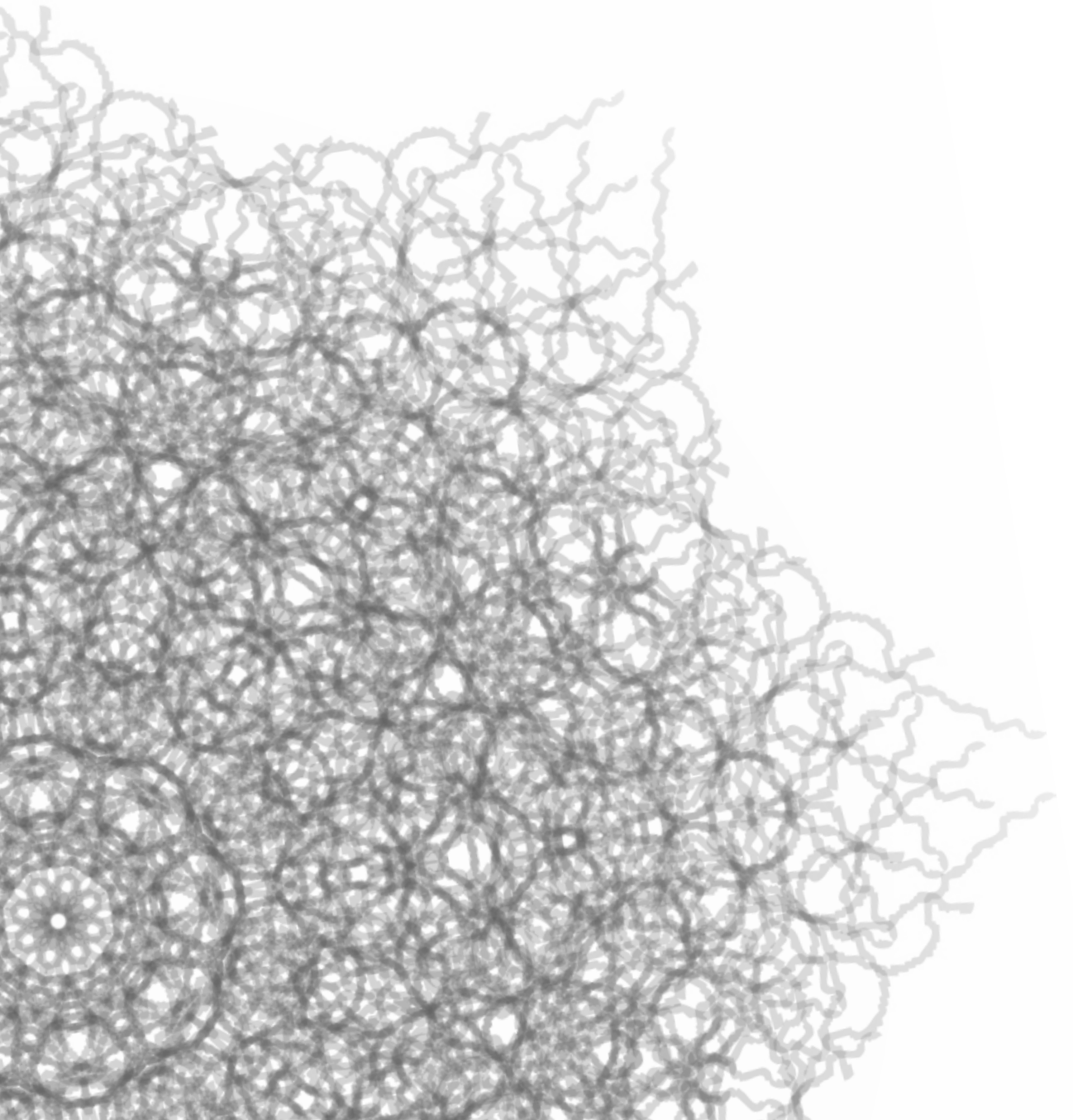
Community Wellness Services' Interns Present on Lessons Learned During the 2011-2012 School Year

Presenter(s): Jennifer E Kincaid, Carly A Ridge, Julie R Wise
Advisor(s): Laurie L Malone
Community Wellness Service - Course Project, 12_SP_HSS_490_P2

Community Wellness Services Interns will be presenting their observations and lessons learned throughout the 2011-2012 school year. Topics being discussed will vary. Interns will cover areas of wellness, marketing strategies, and other important topics of discussion. Please stop by this poster presentation to learn about effective communication of wellness and how you can make beneficial lifestyle changes.

Oral Presentations

WEDNESDAY, APRIL 18, 2012
9AM TO 5PM



COLLEGE OF ARTS AND SCIENCES

BIOLOGY

The Effects of Silver and Titanium Dioxide Nanoparticles on D. melanogaster Life History and Reversal of Effects with Vitamin C Supplementation

Presenter(s): Caitlin B Cipolla-Mcculloch
Advisor(s): Mark G Nielsen
Biology 1:00 PM-1:20 PM
Honors Thesis Kennedy Union - 222

Nanoparticles (NPs) are particles that have one or more dimensions onthe order of 100 nanometers or less. They are of interest becauseparticles of such a small size have unique properties that differ fromtheir bulk sized counterparts, primarily due to their high surface tovolume ratio. Nanoparticles are increasingly being used formanufacturing and consumer products. As a result, the chance of humanexposure to these materials is increasing. Of particular interest inthis regard are silver and titanium dioxide NPs, used in sunscreen,cosmetics and technological manufacturing. We show that silver, butnot titanium dioxide particles are toxic to longevity, reproduction,and development. We were able to reverse these effects usingantioxidants, which supports an oxidative stress model of nanoparticletoxicity and provides a means to remediate nanoparticle toxicity.

Blow Fly Oviposition Dynamics on Liver Bait and Swine Carcasses Exposed at Dusk

Presenter(s): Maureen C Berg
Advisor(s): Mark E Benbow
Biology 2:00 PM-2:20 PM
Independent Research Kennedy Union - 211

One aspect of forensic entomology uses insect evidence to estimate a time of death (TOD). The major assumption that blow flies do not oviposit at night can potentially offset TOD estimates up to 12h. Previous studies have indicated either no observed nocturnal oviposition, or reduced activity associated with artificial lighting. The objectives of this study were to test for nocturnal oviposition, and to evaluate the effects of lighting conditions on oviposition, and further to monitor oviposition on replicate swine carcasses within different habitats.In the Liver Experiment, we evaluated blow fly oviposition of liver baits under three experimental light treatments in a wooded lot. We hypothesized that nocturnal oviposition would not occur, but diurnal oviposition would be correlated with environmental conditions. In summer 2009, liver bait (N=3) was placed out 2hrs prior to sunset, and oviposition was monitored for 24h (determined by NOAA). Approximately 25% of collected eggs were reared for identification. A regression analysis for Phormia regina was developed to predict the egg number from egg mass ($F=1775$, $df=43$, $p<0.0001$, $R2=0.97$). From all samples, only 90 eggs were collected within 2h of sunset; no oviposition was documented during nighttime hours. There were statistically significant effects of light ($F=27.86$, $df=3$, $p<0.0001$) on diurnal oviposition in August 2009, which was significantly the warmest month (mean nighttime temperature of 20°C). There was less diurnal oviposition in months with average nocturnal temperatures from 10-20°C. In the Carcass Experiment, replicate swine carcasses were monitored for oviposition as described above. In 2009, 2010, and 2011, oviposition occurred no later than sunset and no earlier than two hours after sunrise. This study demonstrates that early sunset/sunrise oviposition by blow flies varies greatly, and the variability due to location, temperature, humidity, and light should be taken into consideration when making TOD estimates using insect evidence.

Comparative Bioassesment of Tropical Watersheds Relative to Habitat Degradation in the Republic of Palau

Presenter(s): Jonathan B White
Advisor(s): Mark E Benbow
Biology 2:20 PM-2:40 PM
Independent Research Kennedy Union - 211

The Republic of Palau is a developing group of islands located in the southwest corner of Micronesia. Specifically one island of Palau, Babeldaob, has recently become a high tourist attraction due to the vast diversity of coral reefs and other exotic flora and fauna. Conforming to this interest

in tourism the Republic of Palau constructed its first compact road between 1999 and 2003. The compact road threatens the diverse environment that currently exists by means of stream silt load and sedimentation. In order to monitor the health of the ecosystem a bioassessment program, using macroinvertebrate functional feeding group data and associated ecosystem attributes, began in 2003 and was conducted subsequently in 2004, 2009, 2010, and 2011. In 2010 and 2011 AFDM, chlorophyll a, and water quality measurements were collected in addition to macroinvertebrate samples. The objective of this long term study was to monitor the overall ecosystem health and stability of the island over a decade, both during and after road construction. We wanted to understand the variation among watersheds through methods of rapid bioassessment as well as the recent collections of AFDM and chlorophyll a. The current data on chlorophyll a, AFDM, and biomass turnover rate were compared among four streams in 2010 and 2011, as well as the total abundance of macroinvertbrates between streams and years. The macroinvertebrate data for 2010 and 2011 are unavailable at this time due to logistics. The streams showed a significant drop in ecosystem health immediately after the construction of the road, however in recent years the data provide evidence that the streams are regaining health by invertebrate abundance and diversity.

Riparian Forest Invasion by a Terrestrial Shrub (Lonicera maackii) Impacts Aquatic Organic Matter Processing and Biota in Headwater Streams

Presenter(s): Rachel E Barker
Advisor(s): Mark E Benbow, Ryan W McEwan
Biology 2:20 PM-2:40 PM
Graduate Research Kennedy Union - 312

Lonicera maackii, an invasive shrub in riparian zones, has adverse affects on terrestrial insects and plants. We investigated linkages between this terrestrial invader and aquatic ecosystems via a (1) senesced leaf pack breakdown experiment and (2) riparian zone restoration experiment. The leaf breakdown experiment was conducted in three headwater streams in southwestern Ohio, and included three leaf pack treatments: L. maackii (invasive), Fraxinus spp. and Plantanus occidentalis (native), and a native-invasive species mix. Leaf breakdown rates for each treatment were calculated and the colonizing macroinvertebrate community was characterized in terms of taxon density and functional feeding group (FFG) relative abundance. In the riparian restoration project, all woody invasive flora was removed in August 2010 from a riparian buffer. Autumnal terrestrial organic litter inputs and macroinvertebrate communities were monitored for approximately one year. Results for the leaf breakdown experiment indicated that L. maackii leaf pack breakdown was significantly faster compared to native and mix-species leaf packs within all stream sites ($F = 20.46$, $P < 0.001$). Lonicera maackii leaf packs also supported a macroinvertebrate community that was significantly dominated by the gathering-collector FFG, which primarily consisted of Chironomidae ($F = 73$, $P < 0.01$). Invasive riparian plant removal significantly decreased L. maackii and increased native litter inputs compared to the upstream control reach ($P < 0.05$). Removal of riparian invasives also substantially influenced leaf deposition of specific taxa (i.e. L. maackii, P. occidentalis; $P < 0.05$). Hydropsychidae and Chironomidae densities were greater in the removal reach and represented a community dominated by collector-gatherers and filterers ($P < 0.05$). These results suggest the presence of L. maackii in the riparian zone acts as a filter for native organic matter. Removal of this invasive species significantly increases native organic matter inputs to the stream system affecting macroinvertebrate communities, thereby, impacting ecosystem processes in headwater streams.

Disturbance and Dynamics in an Old-Growth Forest Remnant in Western Ohio

Presenter(s): Sean M Goins
Advisor(s): Ryan W McEwan
Biology 2:40 PM-3:00 PM
Graduate Research Kennedy Union - 312

Widespread shifts in dominance from Quercus to Acer species have been witnessed in eastern deciduous forests over the last century. Many potential drivers of mesophication have been proposed, including gap-scale disturbances. In this study, Drew Woods State Nature Preserve (DWSNP) was surveyed to determine the forest community structure. Dendroecology was used to determine establishment patterns that have shaped this forest. Our objectives were to: i) quantify woody vegetation within DWSNP and ii) utilize dendroecology to determine establishment strategies of individuals from 3 shade-intolerant genera. Woody species were surveyed for 4 canopy strata within 32 nested plots, and 37 increment cores were collected. Relative abundance and density were calculated for all species in each forest stratum. Dendrochronologies were developed from DWSNP increment cores. Trees with greater early growth (years 1-20) originated via gap-releases, while trees with greater late growth (years 20-40) originated via understory-releases. Acer saccharum was the dominant species in the overstory (29.9% relative abundance; 51.8 stems/

ha), midstory (44.5%; 554 stems/ha), and shrub-layers (49.5%; 11,563 stems/ha). While Quercus (16.1%; 27.9 stems/ha) and Carya (29.3%; 50.8 stem/ha) species were abundant in the overstory, very few stems were found in the shrub and ground-layers (<0.1%). Increment cores were found to have an average inner date of 1880 (+/- 36.7 years). The oldest increment core had an inner date of 1755. More than half (64%) of Fraxinus samples indicated a release from the understory, while the majority of Carya (91%) and Quercus (83%) samples indicated release due to canopy gaps. We concluded that nearly all Carya and Quercus individuals established via canopy gaps, but some Fraxinus were not dependant on gap formation for recruitment to the overstory. Drew Woods will likely continue to be dominated by Acer without widespread disturbances to allow for establishment of shade-intolerant genera such as Carya and Quercus.

Hydroperiod Influence on Bacterial Communities Assessed by Way of Metabolic Profiling

Presenter(s): Allison R Gansel
Advisor(s): Mark E Benbow
Biology 2:40 PM-3:00 PM
Independent Research Kennedy Union - 211

Microbial communities play a substantial role in wetland nutrient and energy cycling, and are the foundation for the role of filtering and biochemical degrading that wetlands play for some water treatment facilities. It has been found that water hydrology can influence these microbial communities; ultimately affecting both the nutrient and energy cycling. We hypothesized that microbial communities would develop significantly different succession patterns under different water level fluctuation conditions. During this study, hydroperiod regimes were manipulated in laboratory microcosms in order to observe bacterial succession and the variation with degree and duration of inundation, ultimately reflecting natural changes in wetland hydrology. Six microcosms, containing water and detritus, contained a slide apparatus that horizontally distributed six inundated glass slides. These glass slides were exposed to two different regimes: unstable (daily water removal and replacement of water after 24h) and stable (no water removal). Microcosms two, three, and six were randomly selected to model unstable hydroperiods and microcosms one, four, and five were randomly selected to model stable hypdroperiods. Two of the six slides were randomly harvested in each microcosm on three dates throughout the study. Each slide was then swabbed in order to test for metabolic profiles with BioLog Ecoplates. Preliminary results indicate that the glass slides located in the deeper parts of both the unstable and stable microcosms (closer to detritus), exhibited less carbon source utilization due to a lack of oxygen. From this it can be inferred that anaerobic bacterial communities were growing on the slides. Data analysis is ongoing and will yield further conclusions.

Response of Invertebrate Grazers to the Influence of Abiotic Factors on Epilithic Biofilm Development

Presenter(s): Jennifer M Lang
Advisor(s): Mark E Benbow
Biology 3:00 PM-3:20 PM
Graduate Research Kennedy Union - 211

Epilithic biofilms are influenced by both abiotic (e.g., light, flow) and biotic forces (e.g., invertebrate grazing). These factors have been extensively studied independently; however, there is less understanding of how abiotic conditions drive biofilm succession and associated grazer feeding preference during this process. Biofilms were grown on unglazed porcelain tiles under natural, increased turbulent flow, dark, and flow/dark treatment conditions in a third order stream. Influence of abiotic factors on biofilm succession was characterized at four stages of growth: 7, 14, 21, and 28 days. Tiles at each stage of growth were then subjected to invertebrate grazing (snails, mayflies, snails/mayflies) in the lab. Abiotic growth conditions significantly influenced primary production, biomass, and turnover, with dark conditions lowering primary production while more turbulent flow significantly increased biomass and turnover. Invertebrate grazers preferred older (21 days) biofilm communities that developed under turbulent flow conditions while biofilm communities grown under dark conditions were less grazed, which varied depending on biofilm stage. These results provide mechanistic understanding of how abiotic conditions mediate grazing activity during biofilm succession, with potential impacts on nutrient cycling.

Forensically Important Insect and Metabolic Community Differentials via Vertebrate Scavenging

Presenter(s): James M Alfieri
Advisor(s): Mark E Benbow
Biology
3:20 PM-3:40 PM
Independent Research
Kennedy Union - 211

Blow fly (Calliphoridae) species identification is crucial to estimating a post-mortem interval (PMI) and is important for understanding the ecology of carrion decomposition. However, persisting low temperatures will greatly reduce blow fly activity, and thus affect PMI estimates during colder seasons. This leaves the process of decomposition to microorganisms that can survive low temperatures, and vertebrate scavengers. The effect of these vertebrate scavengers on blow fly colonization and succession has not been thoroughly described or quantified. In this winter field experiment, six Sus scrofa carcasses were randomly placed along a field edge in Farmersville, Ohio. Three of the carcasses were placed in exclusion cages to prevent vertebrate scavenging and thus acted as a control. The remaining three were left accessible to scavengers. Stealth game cameras were set to record any motion around the carcasses, and thus any scavenging events. Initial and periodic microbial swabs were taken when scavenging occurred on a carcass to provide a metabolic profile of the microbial communities of the carcass. Data suggest that there is a linear relationship between scavenging incidents and temperature. Also, carcasses that were scavenged have decomposed at an exponentially higher rate than those not scavenged. There was also a difference in microbial community metabolic profiles among the scavenged carcasses compared to the control carcasses.

Beta diversity dynamics across topographic gradients in the herbaceous layer of an old-growth deciduous forest

Presenter(s): Julia I Chapman
Advisor(s): Ryan W McEwan
Biology
3:40 PM-4:00 PM
Graduate Research
Kennedy Union - 211

Herbaceous species composition and productivity are known to vary with topography (i.e. slope, aspect, elevation), but how this spatial variation is linked to temporal dynamics is not well studied. We investigated the influence of topography on seasonal species turnover (beta diversity between time points) and vegetative cover over a growing season. We hypothesized that (H1) the magnitude of herbaceous layer species turnover would vary with aspect, elevation, and slope (in order of decreasing importance), (H2) herbaceous cover would vary significantly with topography, and (H3) the strength of these relationships between species turnover/cover and topography would change through the growing season. The herbaceous layer was sampled in April, June, and August of 2011 within 320 1m2 plots stratified throughout an old-growth central Appalachian forest. Percent cover was estimated for each species, and species turnover was calculated as Bray-Curtis dissimilarity.Mean seasonal species turnover was significantly greater ($P < 0.001$) between April and June (0.56 Â± 0.02 SE) than between June and August (0.27 Â± 0.02). Seasonal species turnover was generally not statistically related to topography; however, a weak linear relationship was found between aspect and turnover across the entire growing season (April to August; $r2 = 0.05$, $P < 0.05$), suggesting greater species turnover occurred on north-facing slopes. Herbaceous cover varied with elevation, and this significant quadratic relationship ($P < 0.01$) was consistent over time. The linear relationship between cover and aspect was stronger in April ($r2 = 0.08$, $P = 0.01$) than June ($r2 = 0.05$, $P = 0.05$), but did not exist in August. Slope was not a significant predictor of cover. Overall, local topographic variation related more strongly to herbaceous cover than species turnover, but these relationships were weak. Further work is needed to understand drivers of herbaceous layer dynamics and their interactions in eastern deciduous forests.

Reprogramming Fibroblasts into Stem Cell like Cells

Presenter(s): Christopher J Kovaleski
Advisor(s): Yiling Hong
Biology 4:00 PM-4:20 PM
Honors Thesis Kennedy Union - 211

Stem cells are a unique type of cell that have the ability to renew themselves through cell division and to differentiate into specialized cells (giving rise to the specific cells of the developed human body). Consequently, stem cells have potential to serve as therapeutic treatment because of their ability to differentiate into specialized new tissue. This project is to identify a novel approach to derive pluripotent stem cells from fibroblasts through chemical treatments. These fibroblast cells will be converted from an elongated fibroblastic appearance to stem cell like cells using a combination of proteins and chemicals (RG 108, (R)-(+)-Bay K 8644, BIX 01294, and Trichostatin A). The converted stem cell like cells have been characterized with stem cell factor expressions that distinguish stem cells from differentiated somatic cells.

The role of diet and sex in the gustatory behavioral responses of the blow fly, Lucilia sericata (Diptera: Calliphoridae), to decomposition-related amino acids

Presenter(s): Allissa M Blystone
Advisor(s): Karolyn M Hansen
Biology 4:00 PM-4:20 PM
Graduate Research Kennedy Union - 312

Blow fly members of the family Calliphoridae, specifically Lucilia sericata, are important to forensic investigations by aiding in the determination of a post-mortem interval, or the time elapsed since the expiration of a living organism. Decomposing organic material is a source of nourishment and is key to the normal development of the blow fly; without a nutritive source the eggs will often fail to hatch, and the larvae will fail to pupate. Nutrition is not only vital for proper larval development, but also for physiological maintenance in adults. Attracted to the volatile organic compounds (smells) released by decaying material, L. sericata will alter its behavior to fly towards the decaying source of protein. It is known that a protein meal is essential for sexual maturation in female blow flies, but the nutritional role in males has yet to be determined although it is typical to find both males and females near and on decomposing material. Seeking to understand the role sex and nutrition in the attraction of blow flies to different nutritive sources, and building on previous research that shows a sex difference in the gustatory response of the blow flies, both male and female adult blow flies were raised from emergence on diets of either honey-water only, or honey-water and a broad-spectrum protein source (bovine liver) after which the flies were then offered a meal of decomposition-related amino acids to determine if diet affects behavior. Six decomposition-related amino acids and two sugar sources (in water) were tested for gustatory response, utilizing the proboscis extension reflex (PER) assay to determine differences in the behavior of the sexes associated with the stimulus. Results demonstrated that there are statistically significant age-, sex-, and diet-related differences associated with olfactory attraction to and gustatory interest in the amino acids and sugars tested.

CHEMISTRY

Nickel, copper, and zinc centered ruthenium substituted porphyrins: Effect of transition metals on photoinduced DNA cleavage and photoinduced melanoma cell toxicity

Presenter(s): Patrick J Sweigert
Advisor(s): Yiling Hong, Shawn M Swavey
Chemistry 2:20 PM-2:40 PM
Honors Thesis Kennedy Union - 311

Synthesis and electrochemical properties of a diruthenium porphyrin complex and three subsequent complexes with nickel(II), copper(II), and zinc(II) ions inserted into the porphyrin center are outlined and characterized. DNA titrations of the complexes indicate that they interact strongly with DNA potentially through an intercalation mechanism. Irradiation of aqueous solutions of the complexes and supercoiled DNA shows nicking of the sugar-phosphate backbone of DNA for the nickel(II) and copper(II) complexes and complete photocleavage for the zinc(II) complex. Cell studies with dermal skin (normal) fibroblast and melanoma cells indicate the free base porphyrin is toxic to both normal and melanoma cells,

while the nickel(II) and copper(II) complexes are non-toxic to both cell lines when irradiated. The zinc(II) complex is non-toxic to normal cells but toxic to melanoma cells when irradiated under the same conditions.

CRIMINAL JUSTICE PROGRAM

Correcting Corrections-Based Programs in Juvenile Detention Centers

Presenter(s): Megan B Osborn
Advisor(s): Timothy F Apolito, Arthur J Jipson
Criminal Justice Program — 11:00 AM-12:00 PM
Senior/Capstone Project — St. Joseph's Hall - 25

Corrections-based programs apply to juveniles who commit minor offenses while failing to comply with lesser punishments granted to them through the Juvenile Justice System. Although corrections-based programs are a form of punishment implemented by the Juvenile Justice System, are they truly successful in preventing juvenile offenders from committing future crimes? Through conducting a series of interviews and surveys, this study aimed to analyze corrections-based programs currently implemented at the Center for Adolescent Services (CAS) located in Montgomery County, Ohio. Additionally, within this study, analysis of juvenile crime statistics within Montgomery County and CAS was conducted to indicate the effectiveness of correction-based programs.

How are Juvenile Sex Offenders Perceived by College Students?

Presenter(s): Lauren M Wargacki
Advisor(s): Dorie M Farrell, Arthur J Jipson
Criminal Justice Program — 11:00 AM-12:00 PM
Senior/Capstone Project — St. Joseph's Hall - 25

The researcher will analyze juvenile sex offender registries and statistics in Montgomery County and in the state of Ohio. The researcher will analyze the differences, and incorporate them into a content analysis. The researcher will also administer a survey to University of Dayton and Sinclair Community College students studying Criminal Justice and Criminology in an attempt to collect information on how juvenile sex offenders are perceived, as well as what influences these perceptions. The methods will be a combination of the survey results, content analysis, statistics and laws gathered regarding juvenile sex offenders.

Thinking Errors and Cognitive Distortions Among Juveniles

Presenter(s): Christa S Natke
Advisor(s): Jeremy S Forbis, Arthur J Jipson, Leslie H Picca
Criminal Justice Program — 11:00 AM-12:00 PM
Senior/Capstone Project — St. Joseph's Hall - 25

In the study of juvenile delinquents there are still many questions as to what makes those youth within a detention facility different from those outside of the system. Arguably the most interesting of these theories lies in the study of cognitions and the way thoughts are formed. By understanding the way different youth think, a whole new field of ideas on rehabilitation can be explored. This has the potential to evoke positive changes within a struggling system. In order to study this further the researcher will distribute the How I Think (HIT) Questionnaire to youth in both settings. This measure was created by Granville Bud Potter from the Ohio Department of Youth Services, Alvaro Q. Barriga of Seton Hill, and John C. Gibbs of Ohio State University. The HIT Questionnaire is a 54 item instrument that measures four categories of self serving cognitive distortions. The instrument will be distributed in a classroom setting and will be administered by the researcher. The data will then be compared to determine any similarities or differences between the two groups. As a result, this research will provide the academic community with a starting block on which to move forward. Through research, different programs can be created to try and curb or overcome juvenile delinquency.

DEA vs. the World: Can the Illegal Drug Trade in Afghanistan be Stopped?

Presenter(s): Jeffrey P Ivas
Advisor(s): Arthur J Jipson, Larry E Schweikart
Criminal Justice Program 1:00 PM-2:00 PM
Senior/Capstone Project St. Joseph's Hall - 25

Over the past decade, there has been an explosion of media coverage on the rise of drug cartels such as the Taliban, Muslim Brotherhood, and Al-Qaeda (Meyer). What many citizens do not know is that the Drug Enforcement Agency has been at the forefront of the war against illegal drug trade in the Middle East. In fact, the DEA is involved in supporting the Department of Defense to combat drug traffickers all over the world in countries like the Philippines, Columbia, Italy, and more. This project will examine how the DEA's role in combating foreign drug traffickers has been transformed over the past decade (Meyer). This research will examine the DEA's increasing involvement in Afghanistan.

Prison Rehab: The Road to Sobriety or Recidivism?

Presenter(s): Lauren E Maddente
Advisor(s): Cynthia C Currell, Arthur J Jipson
Criminal Justice Program 1:00 PM-2:00 PM
Senior/Capstone Project St. Joseph's Hall - 25

In 2011, nearly $5,800,000 was spent just in the state of Ohio on treatment of alcohol and other drug-impacted offenders (Robinson). This large figure demonstrates the prevalence of substance abuse and the connection it has to the criminal justice system, specifically, the correctional system. The social problems associated with substance abuse have many individual and societal costs such as suffering of the addicts and their families and high costs of incarceration, prosecution, and treatment programs which burdens taxpayers (Robinson). In 2001, approximately 80 percent of money spent on corrections was spent specifically on the aforementioned inmates who committed a crime while under the influence, to raise money to support their habit, or any drug or alcohol-related offenses"(12). Because this issue is one that is central to the criminal justice system and furthermore society at large, it deserves more research. This project seeks to examine the effectiveness of drug and alcohol rehabilitation programs in adult prisons in the mid-western region of the United States, by reviewing current literature, conducting primary research, and consulting secondary sources. Through the evaluation of three treatment facilities along with surveys completed by employees at the facilities, employees and other substance abuse programs, and ex-offenders, effectiveness will be measured by employees' and ex-offenders' perception, of the success of the programs. All of these results will be supplemented with secondary research. It is important to acquire feedback from staff members and ex-offenders because they know details about the rehabilitation programs and the outcomes. They can provide researchers with information that cannot be found from conducting secondary research. Though secondary research and statistics are important, primary research will result in specific information that statistics cannot provide. Ideally, incorporating perception will supplement secondary data.

The Forgotten Families? An in-depth Exploration of the Perceptions of Public Child Welfare Employees on the Effects of Parental Incarceration on Families

Presenter(s): Chanelle N Baylor, Jeffrey P Ivas, Lauren E Maddente
Advisor(s): Cynthia C Currell, Arthur J Jipson
Criminal Justice Program 1:00 PM-2:00 PM
Senior/Capstone Project St. Joseph's Hall - 25

This project is constructed to identify and analyze the long and short term effects of children born to incarcerated parents, from the perspective of public child welfare employees. This project will identify the social and psychological effects, among others, that these children and their families have experienced as a result of the parent's incarceration. The data will be gathered by examining the effects of incarceration on children whose parents are (or have served) terms of at least one year in prison. If parents are incarcerated for any reason their children can not only end up with extended family but could even become a part of the foster care or child services system. In order to guarantee a better future for our children, we need to begin with this concern and see how their families can be helped. When the public thinks about criminal justice, they tend to focus on criminals as being individuals. This project is dedicated to resolving that myopia.

Concealed on Campus: Should students and faculty with a concealed carry permit be allowed to carry firearms on Ohio college campuses?

Presenter(s): Tyler J Eidson, Michelle M Miller, Nathanial S Perry
Advisor(s): Timothy F Apolito, Arthur J Jipson
Criminal Justice Program 2:00 PM-3:00 PM
Senior/Capstone Project St. Joseph's Hall - 25

This project will examine concealed carry permits on Ohio college campuses. The research will be focused on if students and faculty should be allowed to carry firearms on campus. The research is driven from an interest in obtaining a concealed carry permit. The research will examine what it means to have a concealed carry permit, when and where one is allowed to carry and most importantly could the law be changed to allow students and faculty to carry firearms on campus? The information for the research will be obtained through a mix of quantitative and qualitative research. There will be both primary and secondary data collected. The primary data collected will be through the researcher obtaining a concealed carry permit. The secondary data will be obtained through interviews and surveys. There will be interviews conducted on people who both agree and disagree on the topic. There will be a survey conducted in order to obtain a sense of how different people feel on the topic of carrying firearms on campuses. The data from the interviews and surveys will be analyzed thoroughly. Research will also be collected through books and journals. With the information collected one will be able to decide if the law could be changed. The information collected will answer the question and give detail to why people agree or disagree. With all this information one could take the research to the next step of helping pursue the changing or not changing of the law as it stands today.

How Limitations Placed on University Police Affect the Campus Perception of Law Enforcement

Presenter(s): Tyler J Eidson, Michelle M Miller, Nathanial S Perry
Advisor(s): Jefferson L Ingram, Arthur J Jipson
Criminal Justice Program 2:00 PM-3:00 PM
Senior/Capstone Project St. Joseph's Hall - 25

This paper researches the relationship between the limitations placed on campus police officers by university administrations and how these restrictions shape the perceptions of the campus community towards officers. To study this, the difference between university police officers and their counterparts in municipal departments will be examined through interviews and survey research. While both groups consist of police officers with the same certifications and similar training, university police officers are often perceived differently and consequently are frequently seen as less authoritative than their counterparts in city police forces (Johnson 2011). This difference in perception, often generated by university policies, reduces the perceived effectiveness of university police officers (Johnson 2011). Many universities place restrictions on their officers regarding the issuance of citations or arrests (R. Groesbeck, Interview with Author, February 15, 2012). In contrast, many municipal police departments leave these decisions up to the discretion of the individual officer (Powell, Pander, Nielsen, 1994 pp30). Further survey research examines the perception of police effectiveness from the standpoint of the university community. This paper discusses how this limitation of police power affects the perception of campus police officers by the university community.

The Mental Crisis: The use of CIT training for college law enforcement agencies

Presenter(s): Tyler J Eidson, Michelle M Miller, Nathanial S Perry
Advisor(s): Jennifer Davis-Berman, Arthur J Jipson
Criminal Justice Program 2:00 PM-3:00 PM
Senior/Capstone Project St. Joseph's Hall - 25

Does CIT (Crisis Intervention Training) have a positive influence on law enforcement response to mental illness on a University campus? Due to the prevalence of mental illness interaction with law enforcement agencies, they have begun to train law enforcement with the CIT program (Munetz, What is CIT?). Being that law enforcement careers see the most mentally ill on a day-to-day basis besides the mental health industry (Center for Problem-Oriented Policing). The question is, are these programs being used with in college police forces regularly, and what is their impact.

Mental illness is very prevalent in young adults, ages 18 to 23, which are the ages of most undergraduate students (National Institute of Mental Health). Thus making university law enforcement having a great potential for the benefit of such programs.

DARE to Question Our Countries Juvenile Drug Programs

Presenter(s): Tyler R Drabenstot, Joshua R Dunleavy, Kayla L Moses
Advisor(s): Paul J Becker, Arthur J Jipson
Criminal Justice Program — 3:00 PM-4:00 PM
Senior/Capstone Project — St. Joseph's Hall - 25

With the War on Drugs still raging across the United States, many lawmakers and educators have begun to focus on training children to never get involved. The Drug Abuse Resistance Education (DARE) program was founded in Los Angeles in 1983 as a tool for combating the growing drug and violence problems experienced by children within the city. According to the official program website, "[DARE] has proven so successful that it is now being implemented in 75 percent of our nation's school districts and in more than 43 countries around the world"(www.dare.com). In this project, the role of DARE in preventing juvenile drug use will be investigated as compared to alternative programs. Multiple studies reviewed throughout the paper show that the DARE program expands drug awareness, and allows positive police interaction with children. Many cited studies, however, have also concluded that DARE has no effect on drug and alcohol use amongst those that graduated from the program (Becker, Agopian & Yeh 1992; Ennett, Tobler, Ringwalt & Flewelling 1994). Other programs, such as All Stars, have begun to emerge as alternatives with higher success rates, better results, but these programs receive less funding. DARE is an important tool for understanding the juvenile justice system because it is a massively funded national program and deals directly with students in K-12. This project will review the literature on the success of DARE as a prevention program in the treatment of delinquency, and it will seek to discover whether alternative programs would serve as more viable options.

Pardon Me: An Inquiry Into the Executive Clemency System in Ohio

Presenter(s): Tyler R Drabenstot, Joshua R Dunleavy, Kayla L Moses
Advisor(s): Jeremy S Forbis, Arthur J Jipson
Criminal Justice Program — 3:00 PM-4:00 PM
Senior/Capstone Project — St. Joseph's Hall - 25

This project will delve into the process necessary to grant a executive clemency in Ohio, examining whether or not this power goes beyond our carefully constructed system of checks and balances. Interviews and surveys will be used to answer the questions: Is the executive clemency system necessary? How often are guilty persons pardoned? Does the pardon system need to be improved? If so, what can be done to improve it?

The CSI effect: A Study in the Perceptions of Crime

Presenter(s): Tyler R Drabenstot, Joshua R Dunleavy, Kayla L Moses
Advisor(s): Dorie M Farrell, Arthur J Jipson
Criminal Justice Program — 3:00 PM-4:00 PM
Senior/Capstone Project — St. Joseph's Hall - 25

"The CSI effect" is commonly known as the way forensic science may shape and influence outcomes within the criminal justice system. Television dramas that rely heavily on forensic science to solve crimes may affecting the administration of justice because, people often misinterpret what actually occurs in real life situations because of these programs. This research project will focus on whether television dramas such as CSI and Law and Order influence students at the University of Dayton, especially Criminal Justice Studies majors. While conducting this research, the researcher will also examine whether television crime dramas deliver more categorical proof than what forensic science is capable of delivering, and what this may change within the criminal justice system.

Human Trafficking Unveiled: Identifying Traffickers and Bringing Them to Justice

Presenter(s): Lauren W Bielak, Briana M Hollis
Advisor(s): Arthur J Jipson, Anthony N Talbott
Criminal Justice Program — 4:00 PM-4:40 PM
Honors Thesis — St. Joseph's Hall - 25

While there is an abundance of research done on human trafficking in general and human trafficking victims (UN.Gift, 2008), there has been little research done on the people that actively promote and seek to continue this criminal enterprise: the traffickers. Human trafficking is defined as the acquiring of a person by force, fraud, coercion and using that person to turn a profit, by labor or sexual exploitation (U.S. State Department, 2000). In this research, psychological, sociological and criminological aspects such as age, education level, socioeconomic status, and criminal background of human traffickers will be examined, in an attempt to create a criminological profile of traffickers that can be used by law enforcement to apprehend them. To get a complete picture, victim characteristics will also be used. Criminological profiles aid in the apprehension of criminals by creating a way to identify them using many different characteristics. Some characteristics that are used are why the offender chose the victim, aspects of the offender's personality, along with physical evidence of the crime. Human trafficking is a global phenomenon and traffickers are making billions of dollars off the pain and suffering of others (Batstone, 2007).

Torture: Perceptions, Ethics, and Reality

Presenter(s): Lauren W Bielak, Briana M Hollis
Advisor(s): Dorie M Farrell, Arthur J Jipson
Criminal Justice Program — 4:00 PM-4:40 PM
Senior/Capstone Project — St. Joseph's Hall - 25

Torture is a technique of persuasion that has been used by several different entities around the world. The definition and use of torture is one aspect of the military that has been frequently debated in the media. Citizens of the United States rely heavily on media coverage, such as television, the Internet and newspapers, for formation about torture. Whether accurate or not, many of these presentations depict the American military in an unfavorable light. Although information presented in the media is not always accurate or unbiased it shapes the perception of the military. This research project seeks to explain the perception of torture that is created and disseminated by the media. Does the United States use torture in ethical situations and what is the relationship between the use of torture in the United States military and American citizenâs perception of the ethics of torture based on what they hear or read in the media?

ENGLISH

A Social Justice Sophomore LLC Service Learning Project

Presenter(s): George C Kemper
Advisor(s): Lori G Phillips-Young, Margaret M Strain
English — 1:00 PM-1:40 PM
Independent Research — ArtStreet - Studio C

The Social Justice Sophomore Learning and Living Cohort's mission is to improve literacy in the Miami Valley. As a member of the cohort, I was trained to tutored students in grades K-8 and young adults by the non-profit organization Project READ. I was then assigned by Project READ to mentor and assist students at Immaculate Conception Grade School with their reading skills. I worked with students in first through eighth grade two days a week. Together, the students and I would work on math, reading skills, and their homework. As I developed personal relationships with these young learners, I found that they helped me to better understand the principles and theories of "justice as fairness" espoused by the late 21st century moral and political philosopher John Rawls. Justice is at the heart of the UD Marianist ideals of lead, learn, and serve. My service learning experience has enriched the way I approach service learning and my commitment to creating a better more literate community.

Ethnographies of Non-profit Organizations Confronting Food Insecurity

Presenter(s): Ibraheem M Alawadhi, Khaled A Alsubaih, Liwei Bao, Daniel F Berko, John J Buckley, Benjamin A Cox, Jared R Crandall, Xxx Duolan, Kellsy E Duthie, Alex J Fitzharris, Collin S Framburg, Logan S Gekeler, Tianyang Geng, Kevin R Gustafson, Zhiyu He, Christophe
Advisor(s): Amanda J Wright Cron
English 2:00 PM-4:30 PM
Course Project, 12_SP_ENG_102_L1 ArtStreet - Studio B

In each of these presentations, students will report on the culture ofa nonprofit organization that confronts an issue within the realm offood insecurity: a local food pantry or food bank, community kitchen,community or urban garden, or national or international food advocacyorganization. In their research, the students employed methods fromethnography, including participant observation, interviews, andcollection and examination of artifacts (including writing). Studentswill report on their individual and collective experiences, making aspecific assertion or assertions about the cultural nature of eachorganization in response to questions not limited to the following:What issues do the organizations confront? What interactions andhabits characterize the organization? How is the organizationsustained? What relationships characterize the organization? How dothe volunteers and individuals served by the organization understandone another? What prior conceptions do the students have about theorganization? In what ways do their prior conceptions relate to theactual culture of the organization.

33: Stories of Flight and Flightlessness in the American Identity

Presenter(s): Michael J Winn
Advisor(s): Joseph R Pici
English 3:00 PM-3:20 PM
Honors Thesis Kennedy Union - 312

These stories and their characters are connected by how they relate to a fictional highway: Highway 33. This highway, whether explicitly or implicitly, both a medium for movement and a place itself, is then the device by which relationships, place, and movement affect and redefine each other. At large, I am exploring how Frederick Jackson Turner's Frontier Thesis (the idea that America is always defined by having an unexplored âfrontierâ to move toward) defines not only America, but Americans; by placing these characters at the threshold of their own personal frontiers, these stories attempt to address the question, "What now?"

Putting Faith Into Action: Fostering Education Through Relationships

Presenter(s): Toriana Cirino
Advisor(s): Lori G Phillips-Young, Margaret M Strain
English 3:00 PM-3:20 PM
Independent Research Kennedy Union - 311

The Sophomore Social Justice Service Learning Community's (SSJSL) mission is to promote literacy. The SJSLC's community partner, the non-profit organization Project READ, trains volunteers to help tutor students in grades K-8 and young adults. After training, I was assigned an afterschool tutoring position assisting students at the Westminster Presbyterian Church in downtown Dayton. Under the supervision of Jim Henry, I have tutored students from E.J. Brown K-8 School. Many of the students who participate in the after school program need assistance in achieving higher results on their Ohio Achievement Test Scores. Through individual attention in this program students continue to progress towards that goal. The schools and the students in the City of Dayton benefit from the extra assistance provided through programs like the one at Westminster. My service learning experience has shown me that tutoring is one way serve our community. It is also an opportunity for me to apply the Marianist ideals of lead, learn, and serve. This tutoring experience was a new experience for me and one that I hope to be able to continue throughout my education at The University of Dayton.

"Teacher or Learner?: Graduate Teaching Assistants' Negotiated Identities and Student Response"

Presenter(s): Sarah N DelMar
Advisor(s): Patrick Thomas
English 3:20 PM-3:40 PM
Graduate Research Kennedy Union - 331

For many Graduate Teaching Assistants the assigned responsibilities require a new professional identity for this may be their first teaching experience as well as their first professional experience. Graduate Assistants within the University of Dayton's Department of English require a complex identity as both a full-time student and a composition course instructor. Teaching loads for Graduate Teaching Assistants require professional identities that are constructed and performed for a significant number of undergraduate students; therefore, it is worth investigating how graduate students' ethos - or credibility - as composition instructors are interpreted by students in their composition courses. A recent survey of undergraduates at the University of Dayton provides insight into the Graduate Teaching Assistants' perceived ethos. The survey explored whether there is a correlation between students' perceptions of their instructor's ethos and students' perceptions, in their later years, of the usefulness of their composition courses. Results from this survey indicate that while Graduate Teaching Assistants construct a professional identity in order to receive a response from students, undergraduates also respond to the teaching performance and develop perceptions of instructors' ethos. Graduate Teaching Assistants are in part underscored by their pedagogical communication as well as judged by undergraduate students on the effectiveness of the teaching and the composition course. Furthermore, the survey results ascertain specific practices Graduate Teaching Assistants, as well as other instructors, may assimilate in order to establish an advantageous perception of ethos.

America Singing Loud: Shifting Representations of American National Identity in Allen Ginsberg and Walt Whitman

Presenter(s): Eliza K Waggoner
Advisor(s): Albino Carrillo
English 4:20 PM-4:40 PM
Graduate Research Kennedy Union - 311

Much work has been done to study the writings of Walt Whitman and Allen Ginsberg. Existing scholarship on these two poets aligns them in various ways (radicalism, form, prophecy, etc.), but most extensively through their homosexuality. While a vast majority of the scholarship produced on these writers falls under queer theory, none acknowledges their connection through the theme of my research-Americanism. Ideas of Americanism, its representation, and what it means to be an American are issues that span both Whitman and Ginsberg's work. The way these issues are addressed and reconciled by Ginsberg is vastly different from how Whitman interacts with the subject: a significant departure due to the nature of their relationship. Ginsberg has cited Whitman as an influence on his work, and other scholars have commented on the appearance of this influence. The clear evidence of connection makes their different handling of similar subject matter, and most importantly a subject matter that conveys personal and national identity, a doorway into deeper analysis of the interworking of these two iconic American writers.

FITZ CENTER FOR LEADERSHIP AND COMMUNITY

Destination Dayton: Dayton Civic Scholar Junior Cohort Capstone Project

Presenter(s): Kyle M Grabowski, Zachary S Hadaway, Briana M Hollis, Marina S Locasto, Katherine B Repic, Nicholette T Smith, Amy M Sullivan
Advisor(s): Richard T Ferguson, Suzette Pico, Donald A Vermillion
Fitz Center for Leadership in Community 2:20 PM-3:00 PM
Senior/Capstone Project Kennedy Union - 222

A program of the Fitz Center for Leadership in Community, the Dayton Civic Scholars gives students the opportunity to become civic leaders within the Dayton community. Over three years, Dayton Civic Scholars complete 360 hours of community engagement, academic course requirements, and a capstone project. Presented by the junior cohort of Dayton Civic Scholars, this session will discuss their capstone project, Destination Dayton. The mission of Destination Dayton is to organize and facilitate a series of events that occur in the city of Dayton (outside of the "UD bubble") in

order to further research on the level of student civic engagement at the University of Dayton. We hope this research will help fellow student organizations understand the most effective practices around increasing student engagement in the city of Dayton. To gather data, the cohort is utilizing a variety of survey tools to assess the effectiveness of event marketing,reasons why students choose not to engage the city of Dayton, and what kinds of opportunities students prefer. A campus wide survey was conducted at the outset of the project to collect data. Students who participate in Destination Dayton events complete a pre and post-survey at each event. Finally, a follow up survey is sent to participants two weeks following each event to assess their continuing level of engagement. Two events have taken place thus far, a "Sweetheart Skate" at RiverScape Ice Rink, and an egg hunt service event at Cleveland Elementary School. This Friday, Destination Dayton will be taking students to a Dayton Dragons game, which will conclude the planned events for this semester. Next semester, Destination Dayton will be looking to disseminate the results of our research to other groups on campus. In effect, we hope this strengthens the relationship between our campus and the larger Dayton community.

Dayton Civic Scholars Senior Capstone Project

Presenter(s): Katherine Gonzalez, Bernard D Jones, Katarina A Lucas, Lauren E Maddente, John E McGinnis, Lisa A Ramsey, Lauren A Simcic, Michael J Veselik
Advisor(s): Alexandra L Robinson
Fitz Center for Leadership in Commun — 3:00 PM-4:00 PM
Senior/Capstone Project — LTC - Studio

A core component of the Dayton Civic Scholars program is the senior capstone project. This presentation is about the 2012 cohort project. This project was done in conjunction with students at Meadowdale High School with an emphasis on their futures. This presentation is about how the project was chosen, the planning process, successes, barriers, and the implementation of the two events that were planned.

GEOLOGY

Changes in Precipitation Regimes in the United States

Presenter(s): Thomas A Davis
Advisor(s): Shuang-Ye Wu
Geology — 3:40 PM-4:00 PM
Senior/Capstone Project — Kennedy Union - 312

This study aims to investigate how climate change has affected precipitation patterns in the US. Precipitation provides us with freshwater, the most vital resources for life; but it also brings damages from extreme storms and flooding. There are three major mechanisms of precipitation in the United States: (1) frontal storms dominate during colder months from late fall to early spring and generally last for longer periods of time; (2) convective storms or 'pop-up thunderstorms' are more common during late spring and summer, and typically bring more intense rainfall for shorter period of time, and (3) precipitation due to orographic lifting in mountainous regions. The objectives of this study are to establish (1) if precipitation regimes have changed in the United States in the past 60 years as a result of climate change, and (2) if changes in precipitation patterns are similar for different types of storms and (3) if changes in precipitation patterns are similar in different climate regions. For this purpose, we used hourly and daily precipitation data from 1900 through 2010 collected from National Climate Data Center and US Historical Climatology Network to look for trends in the frequency and intensity of storms of various durations, and examine the statistical significance of these trends. The investigation is conducted in GIS in order to examine spatial variations of such changes

HISTORY

Topics in Contemporary Modern Africa

Presenter(s): Ian M Birthelmer, Patrick D Bittner, Annie R Christy, Lindsey E Cummings, Josh M Donohue, Nicholas M Doyle, Joseph M Edmundson, Acheanyi Fomenky, Fernando E Fuentes, James Harless, Patrick J Larkin, Micah J Lustig, Zachary D Morris, Leah R Mullen, Jessica
Advisor(s): Julius A Amin
History 1:00 PM-3:00 PM
Course Project, 12_SP_HST_337_01 Kennedy Union - 331

This session will address issues which inform our understanding of contemporary African society. Students placed in groups of four will research a topic selected in consultation with the instructor and present their findings at the conference. Topics include genocide, women and development, totalitarianism, resilience, traditions, religion, and many more. The presentations fit well with UD's mission of engagement, excellence, and internationalization.

MUSIC

An Investigation of Contemporary Assessment in Music Education

Presenter(s): Kelly A Connell
Advisor(s): Linda A Hartley
Music 2:40 PM-3:00 PM
Independent Research Kennedy Union - 311

Measurement and assessment are becoming increasingly important tools to all music educators. National education legislation such as No Child Left Behind has recognized music as a core curricular subject. Since then, little has been done to assess music students to ensure that a set of basic skills and knowledge is being achieved. While national and state music standards exist, these standards are usually not mandatory and merely serve as a guide or recommendations for music educators to follow. While other core subjects endure severe oversight and rigorous testing at state and local levels to measure whether or not students are attaining minimum standards, some music educators are pushing for national testing of music students to demonstrate that music has an academically measurable component. Yet other music educators are fearful that assessment of music education will have the same negative effects that other core subject high-stakes testing has had on schools. The purpose of this research is to investigate the current debate on national music assessment and whether music education's place in the core curriculum demands an increase in oversight through standardized music assessment of students in music education classes.

PHILOSOPHY

"Poetry Is Ontology": Tragedy and Sacrament in Rowan Williams's Theology of the Arts

Presenter(s): Dennis M Cox
Advisor(s): John A Inglis
Philosophy 1:00 PM-1:20 PM
Graduate Research Marianist Hall Learning Space - 206

In a book on the theology of art, Rowan Williams--the 104th and current Archbishop of Canterbury--approvingly quotes Jacques Maritain, saying, "Poetry is ontology." The arts, according to Williams, are related to our knowledge of being--that is, at its best, art is concerned not simply with abstract beauty or expressing the artist's will, but with disclosing reality. Integrity in any artistic endeavor, then, is about the struggle of seeing the connections that are there, of rendering some sense of those connections in another mode, and of facing--with unflinching honesty--the totality of human existence, including its finitude and brokenness. After tracing several of Williams's theological-aesthetic themes, this paper argues first that this theology of the arts represents a significant aspect of the Archbishop's thought, and second that his aesthetic is uniquely and importantly attentive to questions of beauty and brokenness--that is, of discerning God's goodness in a wounded world.

Making Money and Making a Difference in Malawi, Africa.

Presenter(s): Hillary A Cook, Allison M Varricchio
Advisor(s): Jason L Pierce
Political Science 1:00 PM-1:20 PM
Independent Research Kennedy Union - 312

Maji Zuwa is a newly established NGO in Malawi, Africa that aims to operate as a profitable economic empowerment lodge while enabling sustainable development within the surrounding villages. Maji Zuwa, meaning water and sun, operates as a social entrepreneurship enterprise that encompasses a lodge where vacationers, students, and service groups can visit for an atypical travel experience. Maji Zuwa also operates a non-profit organization, Determined to Develop, a registered 501(c)(3), to lift Malawians out of poverty through grassroots development projects. The goal of Maji Zuwa is to empower Malawian people to live a life of dignity without providing handouts to those in need. This paper assesses the effectiveness of Maji Zuwa in meeting its goals and utilizing its resources to promote development. The researchersÂÂ conducted ethnographic field research in Malawi and collected over forty interviews with individuals directly impacted by the developmental projects carried out by Maji Zuwa. The findings suggest that since Maji Zuwa is in its preliminary stages of operating as an NGO, it does not have the resources, specifically monetary, to successfully promote sustainable development in the region. However, in time Maji Zuwa will receive the necessary domestic and international support to promote development.

Slavery through the Ages; An Historical Narrative on Bondage and Ideology and the Institution of Slavery Today

Presenter(s): Rebecca M Elderkin
Advisor(s): Dorian Borbonus, Anthony N Talbott
Political Science 1:00 PM-1:20 PM
Course Project, 11_FA_POL_300_04 Kennedy Union - 311

The purpose of this research is to identify major categories in which slavery in the West is defined in order to create a historical narrative on the institution of slavery. This narrative will end with contemporary slavery, whereby history and historiography will be used to frame the way in which slavery is popularly thought of today. The study will briefly cover slavery during five major time periods; the purpose of chronological separation is to illustrate how slavery influenced each of these societies and how each society influenced the institution of slavery. The first time period will be antiquity, covering what is known of slavery in ancient Greece and Rome. Second, medieval slavery will be compared to ancient slavery and be analyzed as a precursor for the third era, the oft referred "Enlightenment era." Here, focus will be on the contrast between popular literacy and the reality and tenacity of the institution of slavery. The fourth era will be narrowed to civil controversy over slavery in the United States. Finally, the fifth period is the modern-era, wherein twenty-seven million slaves exist, a larger number than any other period in history.

U.S. Foreign Policy in an Era of Change

Presenter(s): Maria Alarcon Garcia del Real, Alex K Antony, Chin Yi Chen, Lindsey E Cummings, Timothy J Finnigan, Amanda L Fioritto, Brian P Focareto, Scott Fogel, Belmari Gonzalez,
Nuria Eugenia Gonzalez Pedrol, John E McGinnis, Erika C Morris, Sandra Rodriguez Pintor
Advisor(s): Margaret P Karns
Political Science 1:00 PM-4:00 PM
Course Project, 12_SP_POL_408_01 Marianist Hall Learning Space - 217

The rise of emerging powers such as China and India and the effects of the wars in Iraq and Afghanistan, the 2008 global financial crisis, and high budget deficits have created a number of challenges for US foreign policy in responding to these changes. This series of research presentations will examine some of those challenges and analyze factors that have shaped specific US foreign policy decisions. One group of presentations will concern responses to "Drug Trafficking and Violence in Mexico" as well as "The Leftward Turn in Latin America" and "Cuba and the Continuing US Embargo." A second set of presentations will focus on "The US and Pakistan," The US and the Palestinians," "The US and the Egyptian Revolution of 2011," "Comparing the US Decisions to Invade and Withdraw from Iraq," and "The US and Reconstruction in Iraq." The third group of presentations

will concern "The US and Rising China," "The US and Human Trafficking," "The Judiciary and US Foreign Policy,", "The US and the Geneva Conventions," and "The US and the International Criminal Court."

The Diffusion of Human Trafficking Legislation across the American States

Presenter(s): Christopher P Klarich
Advisor(s): Nancy A Miller, Anthony N Talbott
Political Science 1:20 PM-1:40 PM
Independent Research Kennedy Union - 311

Despite bipartisan support for anti-human trafficking related legislation, most states continue to lack comprehensive legislation. In fact, hundreds of bills are proposed annually, yet some states still completely lack a basic criminalization statute. This study uncovers common variables that lead to the adoption of anti-trafficking in person policies by applying research on the diffusion theory of public policies. This framework of analysis provides valuable insight concerning the underlying mechanisms of anti-trafficking policy diffusion across the American states. These results indicate how advocates can manipulate public policy diffusion in order to promote the prevention of trafficking, protection of victims, and prosecution of traffickers. Furthermore, our results provide a strong foundation for future research that could address widespread inadequacies regarding victim services among states.

Addressing Human Rights Abuses in Women's Prisons with a Gender-Responsive Model

Presenter(s): Elizabeth A Myers
Advisor(s): Natalie F Hudson, Rebecca S Whisnant
Political Science 1:40 PM-2:00 PM
Independent Research LTC - Studio

This presentation will examine the current masculine approach to prisons systems in the U.S. and the problems that women face as a result of this structure. In order to address the current climate and human rights abuses of women in prison, experts suggest a gender responsive model in order to rehabilitate these women and mothers so that they can be successful upon their release.

Our Contribution to Slavery as Consumers

Presenter(s): Belmari Gonzalez
Advisor(s): Anthony N Talbott
Political Science 1:40 PM-2:00 PM
Course Project, 12_SP_POL_300_04 Kennedy Union - 311

Many people today assume that slavery was abolished in the 19th century and many more think that the word "slave" cannot be applied to any person in the 21st century. That belief is wrong. Slavery is alive and well and we as consumers are contributing to it with our demand for high quality products at low prices. My presentation focuses on products that we consume everyday and how these contribute to the continuation of slavery. My research will also show what countries where slavery is still practiced are doing to eradicate it.

Human Rights in U.S. Foreign Policy

Presenter(s): Carly A Cenedella, Molly C Daniels, Rosemary C Eyerman, Megan Hils, Kristen J Sapyta, Lauren A Simcic, Michael J Veselik
Advisor(s): Natalie F Hudson
Political Science 2:00 PM-3:00 PM
Senior/Capstone Project Marianist Hall Learning Space - 206

Seniors in the Human Rights Studies Program will host a teach-in on contemporary human rights issues. The presentation will cover an overview of the modern human rights movement, the causes and effects of rightsâ violations today, and the range of actors responsible for protecting and promoting human rights. Students will explore these issues by taking a closer look at U.S. foreign policy intervention and business corporate responsibility. With this case study on business and human rights, there will be a strong focus on the question of manufacturers' accountability

for socially responsible practices. Students participating in the teach-in will explore the enforcement of federal and business policies from legal, economic and ethical perspectives.

Life In the South African Townships

Presenter(s): Olivia M Kellman
Advisor(s): Anthony N Talbott
Political Science — 3:20 PM-3:40 PM
Independent Research — Kennedy Union - 311

During winter break 2011 - 2012, my family and I visited the country of South Africa. One day we visited the townships in the city Cape Town. During that visit, I shot a video of what we saw and how the people lived. In this video you will learn about their struggles of poverty and lack of education. South Africa has recently joined the modern world of technology but the townships are still an issue even after the fall of Apartheid in 1994, where the national party government enforced a system of racial segregation. However, the effects of the Apartheid are still apparent. Through my presentation, you will learn that not only is race still an issue, but also the government is not even sure of the number of people that actually live in the townships. A majority of the children who grow up in the townships do not have basic essentials such as a bed to sleep in or a bath or shower as we know it. In one case, three different families share one room with three beds and the children have to find a place to sleep on the floor while the parents of each family take a bed. The people there want the rest of the world to know the conditions that they live in. Here in America, not many people know the reality of everyday life of the townships in South Africa. What we can do to help is make others aware of this reality and spread the word.

PSYCHOLOGY

The Psycho-Ecological Systems Model for Engaged Scholarship and Service Learning: Theory, Research, and Practice

Presenter(s): Alisa B Bartel, Sarah L Bidwell, Haylee Deluca, Kirsten M Kasper, Sara E Mason, Nyssa L Snow, Laura E Stayton, Anne L Steel
Advisor(s): Roger N Reeb
Psychology — 2:00 PM-3:00 PM
Independent Research — LTC - Team Space

The Psycho-Ecological Systems Model (PESM; Reeb and Folger 2012), which was developed to inform and guide engaged scholarship and service learning research, integrates three conceptual developments: the principle of reciprocal determinism (Bandura 1978); the biopsychosocial model (Kiesler, 2000) and the ecological systems model (Bronfenbrenner, 1979). The current presentation will describe PESM as well as a current project guided and informed by PESM, i.e., the multidisciplinary service-learning project focused for homelessness in Montgomery County, Ohio. With PESM as a guiding conceptual model, a study is being conducted in which professionals in the community as well as faculty members and staff at UD are interviewed to identify community needs regarding homelessness, with the plan of matching those needs with existing or potential service learning projects. At present, the researchers are in the process of performing a content analysis of the interviews that have been conducted thus far. In addition to describing PESM, this presentation will discuss (a) the initial findings of the content analysis, (b) plans for fully developing the multidisciplinary service-learning project for homelessness, (c) plans for evaluating the project, and (d) current ideas for further developing PESM as a conceptual model.

RELIGIOUS STUDIES

The Contested Body: Mystical Body of Christ Theologies in Early Twentieth Century Europe

Presenter(s): Timothy R Gabrielli
Advisor(s): William Portier
Religious Studies — 11:00 AM-11:30 AM
Graduate Research — LTC - Team Space

This paper, supported by a Graduate School Summer Fellowship, analyzes the burgeoning of mystical body of Christ theology in Europe during the first part of the twentieth century, particularly during the Great Depression and the Second World War. It argues that mystical body theology was a rather slippery image that theologians needed to "ground" in some more concrete reality. As such, what is referred to as the "virtual explosion" of mystical body theology in the 1920s and 1930s was not monolithic. A careful look at this "explosion" evinces various schools - mystical body theologies (plural) - centered on where or what made the mystical body of Christ more concrete in various cases. Roman theologians often grounded the mystical body of Christ firmly in the visible Roman Catholic Church. Some, mostly German, theologians grounded the mystical body in the nation-state. Karl Adam had this second tendency; he found, and developed, affinities between mystical body theology and the racial politics of the rising Nazi regime, emphasizing the purity of bloodlines and the strength of the body politic. Other, mostly French, theologians saw the mystical body of Christ as inseparable, indeed primarily grounded in, the liturgical and sacramental life of the Church. Lambert Beauduin, Henri de Lubac, and Virgil Michel (on this side of the Atlantic) stand in this last stream. This paper argues that the mystical body theology of this last group was the most fruitful, opening up avenues for Church reform rooted in solidarity.

Just War as Christian Discipleship: A Critical Examination

Presenter(s): Herbert D Miller
Advisor(s): Kelly S Johnson
Religious Studies — 1:20 PM-1:40 PM
Graduate Research — Marianist Hall Learning Space - 206

Christians have wrestled with the theological and ethical implications of participating in warfare from the earliest days of the faith. One can find within the Christian theological tradition support for a range of positions regarding war, from absolute pacifism to just war to holy crusade. Theologian Dan Bell's book Just War as Christian Discipleship engages this tradition and argues that just war "is an expression of the Christian community; an outgrowth of its fundamental confessions, convictions, and practices; an extension of its consistent, day-to-day life and work on behalf of justice and love of neighbor (even enemies) in the time and realm of war." Writing as a Christian theologian, Bell wants to make explicit a conviction that many Christians hold dear, namely that participation in war may not be an inherently evil act, but can be an act of love. In this session, I will discuss how Bell's thesis stands in contrast to contemporary just war theories and what he can add to these discussions. I will conclude by highlighting a few concerns I have about his project.

The Wisdom of Style: experiments with genre in recent Christian theology

Presenter(s): Matthew D Archer
Advisor(s): Matthew W Levering
Religious Studies — 3:00 PM-3:20 PM
Graduate Research — Kennedy Union - 222

The question of genre is emerging as a crucial topic in Christian theology. Some authors are calling for a shift in academic theology towards a way of writing that is more attuned to the needs of local church communities. In addition, academic writing, in the form of papers at conferences, scholarly articles, and books, is not the only way that theologians work in their fields. Theologians sometimes write novels, poetry, or sermons along with their more academic-level output. This paper will ask two questions: (1) what can we learn about theology through looking at work by theologians in other genres? And (2) do these genres enable theologians to achieve certain insights that writing in a more academic form could not? This project looks at some works in nonacademic genres by professional academic theologians. It does not look at those who write chiefly as poets who also demonstrate a Christian perspective or works of literature that have themes that could be related to Christianity or explicitly draw on the Christian tradition. For this presentation, I will focus on two professional academic theologians: Rowan Williams and James McClendon.

I have chosen these two because experimenting with genre is a key element of their theological work: Williams says quite a bit about the link between poetry and Christian doctrine in his academic work, and McClendon has made biographies a key part of his little b baptist theology (theology from the perspective of Radical Reformation Church traditions).

Baptism and the Interior Process of Salvation in the Theology of Thomas Aquinas

Presenter(s): Alan D Mostrom
Advisor(s): Matthew W Levering
Religious Studies — 3:20 PM-3:40 PM
Graduate Research — Kennedy Union - 222

Objectives: The obligation to be baptizedâ whether as sacrament or as ordinanceâhas never been a major topic of controversy throughout the history of Christianity. Since the Reformation, the issue of the necessity of being baptized for identification as a Christian has seldom served to increase Christian division. Instead, the necessity of baptism has always been one issue with virtual universal agreement, with most of the debate over baptism focusing on whether or how it is connected to salvation and forgiveness of sins. Yet, contemporary debate has replaced the issue of baptism's connection to salvation with the ecumenical question of whether or not baptism is a central sign for promoting ecclesial reunion. In light of the ecumenical effort, most theological literature written on baptism has given primacy to questions of its ecclesiological and liturgical dimensions, attempting to define baptism in more conciliatory language. Thus, the older debates mentioned above have become minimized in theological discourse and has created a growing gap in the present literature. The primary aim of my research project is to redress the questions about the relationship between the sacrament of baptism and salvation, and especially re-examine the connections made between baptism as sacrament and the interior process of regeneration, justification, and sanctification. Method: This project uses Thomas Aquinasâ theology of baptism and salvation as the model for approaching questions about baptism's connection to the interior process of regeneration, justification and sanctification. His theology is effective especially because he sees the variety of topics in theology as finally coming together toward a unified whole. Methodologically, I will provide a close reading of the relevant texts in the Summa Theologiae and his commentaries on the Gospel of John and the Letters of Romans. Attention will be given to terminology, sources, and broader theological vision.

Defining Mary's Sinlessness: The Theological Boundaries of the Dogma Based on the Historical Context of Ineffabilis Deus and the Council of Trent

Presenter(s): Benjamin E Heidgerken
Advisor(s): Matthew W Levering
Religious Studies — 3:40 PM-4:00 PM
Graduate Research — Kennedy Union - 222

This paper attempts to specify the theological content of the Dogma of the Immaculate Conception of the Virgin Mary, particularly the affirmation of her immunity from "all stain of original sin." Taken literally, the phrase seems to say that Mary did not have any defects that come from original sin, such as illness, mortality, ignorance, hunger, concupiscence, and the like. But the Tradition (including St. Thomas) has largely recognized that even Christ had some of these defects. It would follow from their genetic relationship that Mary must have had them as well. In light of this relationship, this paper will argue for a narrow interpretation of the Dogma that emphasizes Mary's freedom from all moral stain of original sin. Beyond this preliminary matter, a pressing question in modern debates is whether the last of the defects listed--concupiscence--can be permitted in either Mary or Jesus. The answer one gives arises largely out of the definition that one gives the term. As defined within certain Scholastic schools, concupiscence is actually sinful and thus could not be affirmed in either Mary or Christ. However, this paper will argue that the Dogmatic statement of the Immaculate Conception is itself largely silent on any positive definition of Mary's freedom from concupiscence (which would be strange if it was meant to be included) and, further, that the Council of Trent's Decree on Original Sin defines concupiscence in a way that is at odds with the Scholastic interpretation that calls concupiscence sin in a proper sense. As Trent considers it, concupiscence is not properly sin but rather an occasion for virtue that in no way impedes one's entry into heaven. Defined in this way, concupiscence can be affirmed in both Christ and Mary without insinuating that either had in any way contracted or committed sin.

The American Technological Imagination: A Critical Evaluation of Thomas Edison In A Secular Age

Presenter(s): Adam D Sheridan
Advisor(s): Vincent J Miller
Religious Studies 3:40 PM-4:00 PM
Graduate Research Kennedy Union - 331

The purpose of this project was to apply key aspects of the contemporary discourse regarding technology and secularization to the life and work of Thomas Alva Edison. In terms of discourse, the research relied on the works of philosopher Charles Taylor and social theorist Bruno Latour. Briefly stated, Taylor argues that the modern social imaginary is locked into an immanent frame that is marked by disenchantment and the perceived absence of transcendence in everyday life. Latour affirms that modernity asserts such claims. Yet, once one looks at technology the claims of disenchantment, perhaps, becomes dubious. Between these competing claims lies an opening for examining the social, philosophical, and theological assumptions embodied in technological artifacts. Through an examination of Edisonâs life, thought, and work it was concluded that Edisonâs work and thought complicates a casual interpretation of modern disenchantment. While deeply embedded in Taylorâs secularization thesis, Edison simultaneously supports Latourâs critique of modern disenchantment theories. For Edison electricity occupied a theological space once reserved for concepts such as Divine Providence and the immortal soul, while also maintaining a disavowal of supernatural referent. Thus, while overtly embedded in the immanent frame, Edison also represents a kind of enchantment through technology. Thus, the work and thought of Edison could be rightly called immanent enchantment. Ultimately, an analysis of Edison gestures towards a fresh locus for contemporary discourse concerning technology and secularization.

The Crisis of Suffering: An Exposition of Chalcedonian and Non-Chalcedonian Christology through the Interpretive Lens of Saint Cyril of Alexandria

Presenter(s): John J Allen
Advisor(s): Matthew W Levering
Religious Studies 4:00 PM-4:20 PM
Graduate Research Kennedy Union - 311

The Fourth Ecumenical Council of Chalcedon took place in A.D. 451 but it was the last council that all Christians would find themselves able to accept. Those at the council proposed the doctrine of the hypostatic union: Christ having two natures in one person. The disagreement was "solved" by the Christology of Saint Cyril of Alexandria, but in reality it was only division and disagreement that was solidified by the Council's decision. Interestingly enough, both sides claim to defend St. Cyril's Christological formulations, yet both sides have accused the other of falling short of the theological mark. This indicates to me and to other scholars that the differences in Christology stem largely from linguistic and cultural misunderstanding rather than any viable theological heresy. Hence, a tragic separation occurred between the non-Chalcedonian, Oriental Orthodox Churches, and the Chalcedonian Churches (e.g. the Roman Catholic Church, Byzantine Orthodox Church). This rift has never been successfully bridged, but in the estimation of many scholars and in light of certain ecumenical ventures, such as that of Paul VI, the differences between the two sides have never seemed so inconsequential. If ostensibly the two churches were on the verge of an ecclesial union, then why has so little progress been made in the last thirty or forty years? It is the purpose of this research project to better understand what divides these two churches so as to more effectively speak to the issues that can unite them.

The Mystery of the Social: On the Origin of Social Ethics and the Nature of the Social in Catholic Moral Theology

Presenter(s): Justin J Menno
Advisor(s): William Portier
Religious Studies 4:00 PM-4:20 PM
Graduate Research Kennedy Union - 331

The use of the term 'social' to modify reflection in doctrinal and moral theology is one of the more significant developments in Catholic theological inquiry in the latter half of the twentieth century. This term has not only served to modify recent reflections on the Trinity, but has even, in the

case of social ethics, distinguished an area of inquiry that had not been thematically treated in the history of moral theology. Yet even in light of these developments, there has been little, if any thematic reflection on the precise nature and structure of the social. I seek to provide a corrective to this oversight. The principal tasks of this paper are threefold. First, I plan to provide a brief account of the origins of social ethics in Catholic moral theology in terms of the late twentieth revision of Thomas' account of moral science. Second, I aim to assess the adequacy of two specific revisionist accounts. Finally, I plan to identify and explain some of the promises and limits of the use of the term 'social' to modify ethics in Catholic moral theology.

Distinctive Engineering Students Stemming from UD

Presenter(s): Abigail M Spohn
Advisor(s): Brad J Kallenberg
Religious Studies — 4:20 PM-4:40 PM
Independent Research — Kennedy Union - 222

Dr. Hallinan (Mechanical Engineering Professor at University of Dayton) co-edited a recently published book entitled "Engineering Education and Practice: Embracing a Catholic Vision." This book documents the discussions and lectures that were held at "The Role of Engineering at a Catholic University" conference held at UD in 2005. The role of religion, service, and ethics in engineering programs at a few universities was explored during that conference. With this as a backdrop I assessed the likelihood that the University of Dayton produces "distinctive engineering students" as a result of the Marianist Catholic Education and how ETHOS is just one example. Methods of engineering service-learning at other schools will be overviewed and compared to engineering service-learning at UD.

SOCIOLOGY, ANTHROPOLOGY AND SOCIAL WORK

A Catholic Response to Refugee Resettlement: A Case Study of Catholic Social Services in Dayton, OH

Presenter(s): Samantha L Tsuleff
Advisor(s): Shawn A Cassiman, Kelly S Johnson
Sociology, Anthropology and Social Work — 1:00 PM-1:20 PM
Honors Thesis — Kennedy Union - 312

There are 15.2 million refugees worldwide and Catholic Social Services (CSS) in Dayton, OH helps around 200 refugees per year attempting to meet their basic needs in a new society. This thesis explores the system of refugee resettlement in the United States through a case study and analysis of CSS in Dayton, OH. Through observational research, in combination with interviews and scholarly data, this thesis examines the process of refugee resettlement and analyzes the shortcomings and successes of the program. Research into the core tenets of Catholic Social Teaching (CST), including solidarity and preference towards the suffering, shows that there is more needed to be done to provide the support called for by CST. This thesis examines who is obligated to meet the rights of the refugees, why there is not more support and what additional support could be given to help the refugees obtain a greater sense of human dignity and well-being.

A Culture Forgotten: The Truth about Irish Travellers

Presenter(s): April L Velotta
Advisor(s): Jeanne A Holcomb, Leslie H Picca
Sociology, Anthropology and Social Work — 1:00 PM-2:00 PM
Senior/Capstone Project — St. Joseph's Hall - 13

Irish Travellers have been in existence for centuries and continue to have a history throughout Great Britain. They have been travelling around Great Britain for over 500 years but continue to be discriminated against on many certain levels. The TLC show My Big Fat Gypsy Wedding has highlighted the Irish Traveller traditions in this underground subculture. This project uses a content analysis of this five-part documentary series and the findings suggest this culture is facing oppression, not only amongst outsiders, but within their culture as well. Findings suggest that there is gender discrimination within the culture, especially among women. Traveller women are undergoing conservative changes, but are not far

removed from women in the mainstream culture. This analysis also studies how Traveller women are dealing with these conservative styles placed upon them and how they depict these styles in public.

Drag Kings: Performing Masculinity

Presenter(s): Lauren M Cummerlander
Advisor(s): Leslie H Picca
Sociology, Anthropology and Social Work — 1:00 PM-2:00 PM
Senior/Capstone Project — St. Joseph's Hall - 13

Gender is an achieved status, due to the nature of this cultural construct. Each culture socializes its members to do gender and how to treat others based on their gender performance. In order for anyone to accurately portray a gender they must understand the society's definition and characteristics for both genders. In doing so individuals can apply specific gender characteristics to mark their body as a specific sex and thus take on the gender's role. In turn they can also avoid characteristics which do not fit the gender role they desire to portray often in our society these are characteristics of the "opposite" gender. However the constructed nature of gender is most prevalent and emphasized when individuals seek to perform the opposite gender, otherwise known as drag. Most of the literature on drag focuses on drag queens; this presentation seeks to contribute to the literature on drag kings. In this study, gender performance, political messages, and racial performance were examined through attire, gestures, song selection, and tipping. Through participant observation, data was collected in each of these areas of gender performance and recorded in field notes and observation journal entries of shows. The findings were discussed within the context of the previous literature, and reported though the observation notes and song selection. Suggestions for future research will also be discussed.

Fitting In: Body Image within Sorority life at the University of Dayton.

Presenter(s): Sara K Brooke
Advisor(s): Simanti Dasgupta, Leslie H Picca
Sociology, Anthropology and Social Work — 1:00 PM-2:00 PM
Senior/Capstone Project — St. Joseph's Hall - 13

Research focusing on body image within sorority women at universities indicates negative feelings towards their physical appearances. The present study examines women at the University of Dayton who are affiliated with sororities, ages eighteen to twenty-two and from three different social sororities. The women who participated in the study were involved in qualitative focus group questions about opinions and feelings of what being in a social sorority truly represents. Questions for example included, "Is there a certain uniform policy within your sorority?" and, "Is there a certain pressure to physically look a certain way in order to "fit" in?" The results from the three different focus groups were examined and then further compared to a number of other studies which have been researched and compared to similar topics related to women and negative body image.

Capturing a Snapshot of the Urban Catholic Presence of the Archdiocese of Cincinnati

Presenter(s): Michael J Bennett
Advisor(s): Laura M Leming
Sociology, Anthropology and Social Work — 1:20 PM-1:40 PM
Course Project, 12_SP_REL_598_P1 — LTC - Forum

This presentation will illuminate the decreasing presence of Catholic in urban areas of the Archdiocese of Cincinnati, focusing specifically on St. Mary's Parish in Dayton and St. Francis DeSales in Cincinnati. Founded upon the Catholic Church's teaching of a preferential option for the poor and vulnerable, this presentation and discussion should provoke thought around how the Catholic Church might serve as a significant urban presence, engaging urban residents in ministry and the life of the Church.

Ethnographical Perspectives and Volunteering at Dayton Public Schools

Presenter(s): Michelle Connor, Eileen T Klug
Advisor(s): Simanti Dasgupta
Sociology, Anthropology and Social Work — 1:40 PM-2:00 PM

Course Project, 11_FA_ANT_150_01 LTC - Forum

This project seeks to explore the anthropological perspective gained and experienced when volunteering at a Dayton Public Schools location, specifically Ruskin elementary school. Our project discusses aspects of our experiences there through the lens of anthropology and the many essays we analyzed in class with Dr. Dasgupta. We are focusing on culture and race in an anthropological manner.

Structural Functionalism in Schools

Presenter(s): Nathan C Dombrowski, Alex K Winrich
Advisor(s): Simanti Dasgupta
Sociology, Anthropology and Social Work 2:00 PM-2:20 PM
Course Project, 12_SP_ANT_150_H1 LTC - Forum

After volunteering at Dayton Public Schools, it is apparent that schools provide an important function to society. In this presentation, the function of schools in American education will be evaluated as well as their general importance to society. As an integral part of society, schools are a historical practice that have gained the role of educating the children of the American population. By looking at society as a whole, the small part that schools play cannot be overlooked as society would be unable to function without their existence.

Joking as Justification: The Intersectionality of Sexism, Racism, and Ethnic Humor

Presenter(s): Keelie M Gustin
Advisor(s): Leslie H Picca, Ruth Thompson-Miller
Sociology, Anthropology and Social Work 2:00 PM-3:00 PM
Senior/Capstone Project St. Joseph's Hall - 13

Male and female interactions in daily life are riddled with both overt and subtle references to sexual, racial, and ethnic identity as a means of fortifying the "Other" in reference to those removed from the dominant culture. With reference to this fortification, this project seeks to understand male-female interactions of college students at the University of Dayton and how these interactions perpetuate the "Other" as a means of maintaining the dominance of the prevalent culture and society. The specific interactions of interest are those concerning discussion of race and gender stereotypes, particularly when the two maintain a reciprocal relationship (or consecutively support) one another. Seeking to fill a gap in the mainstream research, this project identifies intersectionality of class, race, background, and gender as a basis for the perpetuation of a cooperative relationship between racist and sexist comments, jokes, and ethnic humor. Facilitation of four focus groups with female participants at the University of Dayton served as a basis for understanding the transformation in perception of racial, ethnic, and sexist joking throughout the college life-cycle of a predominantly white university. The male-female interactions studied in the focus groups seeks to identify and observe the creation and perpetuation of ties between race and gender stereotypes through humor and jokes in a college campus setting.

The Choices Students Make In a School Cafeteria

Presenter(s): Ashley C Sherman
Advisor(s): Theophile J Majka, Leslie H Picca
Sociology, Anthropology and Social Work 2:00 PM-3:00 PM
Senior/Capstone Project St. Joseph's Hall - 13

Ever wonder what really goes on in a school cafeteria? Research was conducted using nonparticipant observation in a diverse school, Dunkin K-8, to examine how students interact in a non- formal setting such as a cafeteria. Previous research suggests that when given the option of where to sit and who to interact with, students took into account their gender and race. Observations took place on three different days, with third through fifth graders and sixth through eighth graders to see how interactions change when students become older. Interviews with three professional who work at Dunkin were conducted to gain further knowledge on the schools the background and their observations while working at Dunkin.

The Epidemic of Higher Education among African Americans in their Collegiate Success

Presenter(s): Bernard D Jones
Advisor(s): Leslie H Picca
Sociology, Anthropology and Social Work 2:00 PM-3:00 PM

Senior/Capstone Project St. Joseph's Hall - 13

Researchers suggested that African American students had not fared well in Predominately White Institutions. What lies between African Americans and their achievement for collegiate success is a question that has not been clearly defined. The importance of investigating this epidemic is to understand these negative outcomes and identify which variables have the greatest impact and represents the biggest obstacle for African Americans. Institutional barriers such as unwelcoming campus climates, racial stereotypes, and faculty relationships have raised concerns as viable factors as to why the attrition rate for African-American students at PWIs is still on the rise. This presentation analyzes results from secondary data anaylsis and student surveys to examine the negative outcomes generated from low graduation and retention rates for African Americans. In this research, socioeconomic challenges are the main reason why there are low retention and graduation rates in higher education. This research examines the prevalent challenges African Americans face to succeed in college.

Transracial Adoption: How White Parents Help Children of Color Form Their Racial and Cultural Identity

Presenter(s): Victoria J Suther
Advisor(s): Jeanne A Holcomb, Leslie H Picca
Sociology, Anthropology and Social Work 2:00 PM-3:00 PM
Senior/Capstone Project St. Joseph's Hall - 13

Transracial and transcultural adoption has been a debated topic worldwide since the 1960âs. With long wait lists for adopting healthy white newborns, more and more white couples are turning to transracial and transcultural adoption. However this is not universally supported. One major concern is that white parents may not have the desire or the resources to help their children of color form healthy racial identities. This project sheds to illuminate this topic by examining the socialization practices used by white parents in transracial adoption in the Dayton area. Face to face, semi-structured interviews were used to gather data from families who either adopted domestically or internationally. Coding was used to find themes in strategies used among the parents and the findings were compared to see how healthy racial/cultural identities were formed.

Managing Emotions and Coping Strategies within Pregnancy Help Centers

Presenter(s): Leah M Grandy
Advisor(s): Shawn A Cassiman, Leslie H Picca
Sociology, Anthropology and Social Work 3:00 PM-4:00 PM
Senior/Capstone Project St. Joseph's Hall - 13

The purpose of this research is to explore the emotional management within pro-life pregnancy-help centers. This project seeks to explore the ways in which pro-life women cope with consulting and working with women who are pro-choice. Data for this research were collected via interviews with consultants at a Pro-Life Pregnancy Help Center in Dayton, Ohio. This research draws on theoretical insights of scholars such as Arlie Hochschild, Patrick Lee and Arnold Arluke. The findings suggest there are multiple coping strategies used by pro-life professional consultants to help deal with the contradiction of interacting with clients who may terminate their pregnancy.

Success in the Non-Profit World: A Case Study of St. Mary Development Corporation

Presenter(s): Mary E Ridella
Advisor(s): Laura M Leming, Leslie H Picca
Sociology, Anthropology and Social Work 3:00 PM-4:00 PM
Senior/Capstone Project St. Joseph's Hall - 13

The objective of this case study is to examine how a faith-based, non-profit-organization adapts in the face of environmental change. St. Mary Development Corporation (SMDC), of Dayton, Ohio, provides affordable housing, homeownership services, and emergency housing. This project examines how it has been able to succeed and stay loyal to its mission, tradition, and values, over many years despite societal changes which provide insight into successful strategies for social service providers. The methodology consists of interviews with four staff members of SMDC and a literature analysis. This case study will review SMDCâs history, structure and organization, services provided, financial performance, goals

and objectives, mission statements, and overall business plan. The study will conclude with an argument that SMDC is a role model faith-based organization and that its strategies could be adapted by other organizations, including for-profit companies, as a means of achieving success.

The Providers: Relationships with Alzheimerâs Patients

Presenter(s): Margaret S Tobin
Advisor(s): Jennifer Davis-Berman, Leslie H Picca
Sociology, Anthropology and Social Work — 3:00 PM-4:00 2PM
Senior/Capstone Project — St. Joseph's Hall - 13

In America today 40 million people are aged 65 and older. The number of older adults living with Alzheimerâs disease currently is as high as 5.3 million and with Americaâs rapidly aging population this number is projected to rapidly increase. Many of these older adults are moving into assisted living facilities, seeking professional caregiving. This study attempts to address a gap in literature by focusing on professional caregivers of Alzheimerâs patients in an assisted living setting. This project attempts to more fully understand the relationship that can form between caregiver and patient in an assisted living facility. Ten semi-structured, face-to-face interviews were conducted with professional paid caregivers from an assisted living facility. The findings were discussed within the context of the previous literature, and future suggestions for research were offered.

Dayton Public School: An Ethnographic look at the Socio-economic Culture

Presenter(s): Andrew M Heitmann, James T Kurzawa, Connor Ratycz
Advisor(s): Simanti Dasgupta
Sociology, Anthropology and Social Work — 4:00 PM-4:20 PM
Course Project, 12_SP_ANT_150_H1 — Kennedy Union - 222

While volunteering as classroom helpers at Edison Elementary School, we were exposed to a different environment than we grew up in. We will take an ethnographic approach to study the various socio-economic culture's present in the Dayton Public School, by drawing conclusions from the classrooms we are associated with.

Beyond the Golden Door: Exploring the Integration of Iraqi Refugees in the United States

Presenter(s): Amanda L Fioritto
Advisor(s): Theophile J Majka, Leslie H Picca
Sociology, Anthropology and Social Work — 4:00 PM-5:00 PM
Senior/Capstone Project — St. Joseph's Hall - 13

The displacement of Iraqis as a result of the War in Iraq is one of the largest refugee crises in the world today. Thousands of Iraqis have been resettled in the United States, and are attempting to start over. However, the transition from oneâs home to host country is often marked by a series of obstacles, including learning a new language, finding work, being accepted by the local community, and overcoming a variety of mental health issues. Interviews with local refugees and community leaders show that Iraqis are not only dealing with the above difficulties, but must also navigate around these barriers within the confines of a national resettlement system much in need of reform. The research, then, focuses on both the local integration of Iraqis in Dayton, as well as broader national policies that influence the refugee resettlement system as a whole. From there, recommendations for improving resettlement are made.

Communication Devices in the Family: Family Satisfaction in a Hand-Held Technological World

Presenter(s): Erin L Nelson
Advisor(s): Jeanne A Holcomb, Laura M Leming, Leslie H Picca
Sociology, Anthropology and Social Work — 4:00 PM-5:00 PM
Senior/Capstone Project — St. Joseph's Hall - 13

Communication technologies have become a major aspect of our social lives. Hand held technologies influence how we get work done, how we learn, and how we communicate with close and distant family members. This study investigates how communication devices are affecting family satisfaction of the middle class in the United States. Using data from the Networked Families study within the Pew Internet and American Life

Project (October 2008, N=2252), I examine the relationship between family satisfaction and hand held technology use within the boundaries of the home and work place. Cross tabs and frequency analysis show the relationship between communication technologies and family satisfaction. Few studies have been conducted on how the communication technologies are changing levels of family satisfaction, and this study suggests more research needs to be done to explore how communication technologies affect the boundary between home and work life.

Patterns and Trends of Juvenile Drug Use

Presenter(s): Elaine M Rocci
Advisor(s): Arthur J Jipson, Leslie H Picca
Sociology, Anthropology and Social Work — 4:00 PM-5:00 PM
Senior/Capstone Project — St. Joseph's Hall - 13

This research examines the impact illegal drug abuse has on juvenile delinquents. The research design is an in-depth secondary data analysis of The Office of Juvenile Justice and Delinquency Preventionâs (OJJDP) Juvenile Court Statistics that are part of the annual report published each year by the OJJDP and housed by the National Juvenile Court Data Archive. This archive stores the automated records of cases handled by courts with juvenile jurisdiction. The annual reports offer access to more than 35 million delinquency cases from 1985 to 2009. This research project analyzes the patterns and trends of juvenile drug abuse from 2000-2009. The juvenile court statistics include 1.7 million delinquency cases per year that provides data to analyze illegal drug use by juveniles. A number of specific questions drawn from these reports will be analyzed to determine the patterns and trends of juvenile illegal drug use within and across the years from 2000 to 2009. Analyzing these case rates will be accomplished through a comparison of questions on age, gender, and race of offender, and illegal drug use. The same questions generated by the researcher will be used to examine each year, leading to an overall analysis of the 2000-2009 time span.

VISUAL ARTS

Senior Capstone Projects in Photography

Presenter(s): Mark D Albain, Christine M Bates, Molly A Geib, Anne K Gerker, Sierra A Schmitt, Kristen N Tellaisha
Advisor(s): Joel A Whitaker
Visual Arts — 1:00 PM-2:00 PM
Senior/Capstone Project — ArtStreet - Studio B

All Photography majors in the Department of Visual Arts present in the Stander Symposium as a component of their capstone course. This capstone course examines the aesthetic, cultural, ethical, and pragmatic issues relating to photography through the production of a portfolio of photographs that address a self-defined and self-directed project. In addition to the photographic work, assigned readings and related written components associated with these readings build practical and conceptual skills that contribute to the production of a professional portfolio and final oral presentation. The Stander presentation is the culmination of the student's senior year in the study of photography.

Between Image and Imagination: American Landscapes from the Dicke Collection

Presenter(s): Erin M Forest
Advisor(s): Roger J Crum
Visual Arts — 1:40 PM-2:00 PM
Independent Research — Kennedy Union - 222

For as long as America has been a country, and even before national formation, artists have been fascinated by the hills, fields, deserts, coasts, and vistas that comprise its varied natural inheritance. Their representations and reconstructions of the land, however, have rarely been strictly realistic. Instead, successive generations of artists have employed the subject of the land as a much as documentation of the American spirit as of the specific landscape before their eyes. This presentation will explore the connection between image and imagination and the role of personal and national spirit in the subtext of the American landscape. A group of American landscapes from the Dicke Collection forms the basis of this exploration of the relationship between the evolving society and its perception of the land it inhabits.

The Classical Influence: The Design of American University Campuses, the University of Dayton, and the Ideals of American Society

Presenter(s): Caroline M Ibbotson
Advisor(s): Roger J Crum
Visual Arts 2:00 PM-2:20 PM
Independent Research Kennedy Union - 222

Since the founding of the United States, institutions both civic and academic have looked to the Greeks and the Romans as models for life and learning. American universities not only drew upon these ancient civilizations for curriculumâtrivium and quadriviumâbut also drew inspiration from their architecture. The University of Virginiaâs campus, designed by Thomas Jefferson, is a prime example of the use of classical design for a college campus both in terms of layout and architectural planning. In the 1920s, the University of Dayton too aspired to possess a campus designed according to this tradition in a new master plan. That ambitious, and now largely forgotten master plan, was far from realized; indeed, only one building from the design was constructed. While numerous reasons may account for how partially the university realized its classical plan, other universities at that time similarly began to depart from both the classical model of education and campus design. The reasons for classical inspiration on American campuses, and the birth, demise, and occasional rebirth of classical models at the University of Dayton are examined by this presentation as a way of interpreting the changing meaning of Dayton's campus over time.

Visual Identity: A Problem-solving Approach to Identity Design

Presenter(s): Gerard A Gerace, Hannah M Magnan, Kelly E Morris
Advisor(s): Jayne M Whitaker
Visual Arts 2:00 PM-3:00 PM
Senior/Capstone Project ArtStreet - Studio E

A visual identity is the personality of a company, institution, small group or organization and is designed to meet specific business objectives. It is most often manifested by way of branding and the use of trademarks and comes into being when there is a common ownership of an organizational philosophy. Students in the senior level Graphic Design III course were required to research, design or redesign, and present a trademark for an existing museum collection or museum. Building upon their mark of identity, students then created a new innovative visual identity for their fictitious client with elements ranging from stationery, business papers, and various two-dimensional print and electronic media to three-dimensional display and or packaging collateral. The visual identity systems reflect a hypothetical but real world approach to product, service, and promotion with specific intentions of broadening awareness of the museum as well as the scope of its potential audience. Each of the projects presented reflect a student's own developmental undergraduate research in the design of the museum collection, its name, marketing position and growth potential. The projects presented are selected samples of the extensive written and visual development that contributed to each of the visual identity design systems with additional design systems on display in the Department of Visual Arts during the closing reception of the annual juried Horvath exhibition in College Park Center.

Fin

Presenter(s): Luke A Effler, Sarah N Fortener, Erin E Gottron, Brandon M Lowery, Sean E Montgomery, Rebecca L Roman
Advisor(s): Michael G Marcinowski
Visual Arts 2:40 PM-3:40 PM
Senior/Capstone Project ArtStreet - Studio C

The Stander Symposium presentation is the final part of the capstone course required for all Fine Art majors. This capstone looks to help define the formal elements within the student's artwork as well as a personal and stylistic approach. This course functions as a way to help students develop a cohesive professional portfolio. The course also acts as a vehicle to prepare students for real world interaction. The students will present their portfolio in a professional format on the day of Stander Symposium as a culmination of the capstone course.

Art Consultation: Designing My Art History Career

Presenter(s): Nicole A Boesenberg
Advisor(s): Judith L Huacuja
Visual Arts 3:00 PM-3:20 PM
Senior/Capstone Project Kennedy Union - West Ballroom

Being an art history major here at the University of Dayton, one may ask: What do you plan on doing after graduating with that degree? A common misconception is the assumption that I will be working at an art museum. With an art history degree, there are plenty more opportunities available than just working at a museum such as teaching, art advising, publishing, antique dealing, freelance collection managing, etc. The career of which I will focus on specifically in this presentation is art consultation. The purpose of this presentation is to inform those about art consultation and offer all the information there is to know about the career. I want to change the minds of those who assume art historians are only suitable for museums and why an art historian like me would be a perfect fit in another career choice such as art consulting.

Design Science | Science Design :Design Proposal for a Geology Department Mini-Museum

Presenter(s): Jennifer C Biette, Erin A Bolles, Lauren E Graehler, Courtney A Morgan, Anna C Spittler
Advisor(s): John V Clarke, Daniel Goldman
Visual Arts 3:00 PM-4:00 PM
Course Project, 12_SP_VAD_490_03 Science Center Auditorium

During the Spring term of 2012, five students from Visual Communication Design and Geology have been focused on the strategy, planning, and design of a Geology Mini-Museum, to be installed in the lower level hallways of the Science Center. This presentation will include an overview of progress and a design prospectus including: the concept and mission of the museum; an articulation of the information structure of the museum and space; and strategies for the development, design, and implementation of the project.

Struggles in Solitude: An Examination of Francisco Goya's Black Paintings

Presenter(s): Paige E Windgassen
Advisor(s): Judith L Huacuja
Visual Arts 3:20 PM-3:40 PM
Senior/Capstone Project Kennedy Union - West Ballroom

In this presentation I will focus on Goya's paintings that he painted on the walls of his farmhouse that have been given the title "The Black Paintings". I intend to show how the relationship of Goya's inner struggles and the struggles in the world around him are manifested in his many works of art, but specifically in his black paintings from 1820-1823. While doing this I will also take into account a few of his other works of art, including some of his Disasters of War series. I will explain how he was dealing with his frustrations in humankind and trying to find hope. There will also be investigation of the ramifications his illness had on his art. I will examine the notion that his Black Paintings were painted with personal expression in mind, that he did not name them, and that through the names we have given them today, we can sometimes assign concrete meaning to them that is not inherently there. I will take into account all different aspects of his life in order to provide a better understanding to his Black Paintings and his reasoning behind them, which I believe is a manifestation of a struggle with internal and external demons.

Baroque Architecture and the Building of Bernini's Baldacchino.

Presenter(s): Courtney Washington
Advisor(s): Judith L Huacuja
Visual Arts 3:40 PM-4:00 PM
Senior/Capstone Project Kennedy Union - West Ballroom

In 1506 the building of St. Peter's Basilica began under the talented hands of Bernini. Using Bernini's plans as the lens, we will dive deep into Baroque architecture focusing on the center piece of the structure, the Baldacchino. The baldacchino is a great canopy structure that is made of bronze and stands tall in St. Peter's. In this presentation, we will also discuss how Bernini was chosen and how he incorporated Pope Urban VIII into his grand structure.

Art of Persuasion: The Decorative Focus of the Vienna Secession

Presenter(s): Sarah R Stull
Advisor(s): Judith L Huacuja

Visual Arts 4:00 PM-4:20 PM
Senior/Capstone Project Kennedy Union - West Ballroom

This examination of the Vienna Secession explores the aesthetic quality of poster design and its relation to advertising of the time period. The goal is to emphasize the style and composition by exploring its visual appeal and use in a public forum. The art of the secession emphasized the decorative arts as well as a fusion of graphic design and literature while leaving behind traditional conventions of design. By evaluating pieces from the popular magazines of the era such as Ver Sacrum and Hobby Horse, I hope to draw parallels between not only their formal features but their persuasive aspects as well. I will then take these characteristics and apply them to the evolution of advertising and its relation to the Vienna Secession's stylistic qualities and decorative focus.

SCHOOL OF BUSINESS ADMINISTRATION

The Experiences of Flyer Enterprises

Presenter(s): Sarah D Hemler, Sean O Holdmeyer
Advisor(s): Janet R Leonard
Business-Office of the Dean — 11:00 AM-12:00 PM
Independent Research — Miriam Hall - 214

Through this presentation, students will learn about the experiences they are offered as part of Flyer Enterprises. We will cover topics such as an overview of our 9 operating divisions, 2 support functions, leadership roles and future projects within the company. Please join us to find out more about the impact FE can have on your life!

Results of operation from two micro-companies of the Sophomore Entrepreneurial Experience Course

Presenter(s): John J Agnello, Vincent M Gritti, Taylor G Lincoln, Thomas G Loerch, Chelsea G Miller, Craig Naylor, Kiley L Powell, Bethany M Suchy, Dimitrios G Tsiribas
Advisor(s): Robert F Chelle
Crotty Center for Entrepreneural Leadership — 3:40 PM-4:40 PM
Course Project, 11_FA_MGT_220_01 — Miriam Hall - 109

The first course in the School of Business curriculum is the Sophomore Entrepreneurship Experience. Team of five to six students form a micro-company, and funded with $5,000 venture capital from the Crotty Center, operate companies for this two semester linked course. Applying classroom concepts of organization, leadership, marketing, accounting, logistics and sales, students apply newly acquired skills to UD based operating businesses. Two companies will present the results from operations.

ECONOMICS AND FINANCE

How Markets and Organizations Fail: Exploring Illusions of Harmony, Predictability, Stability and Rationality

Presenter(s): Thomas P Baker, Matthew J Buse, Megan C Carlson, Alexander J Chengelis, Joseph C Clinton, Alexander J Dejulius, Cole T Eisses, Tyler J Feaver, Daniel T Frommeyer, Alexander M Galluzzo, Miguel R Garraton, Kyle G Graves, Weijie Gu, Monica J Haley, Lindsay M Hill, Owen D Kalsbeek, Michael F Knopp, Leanna R Komanecky, Dominic C Loverde, David J Musuraca, Michael M Orlet, Andrea N Paxson, Erin R Phillips, Lisa A Ramsey, Margret F Reuter, Adam M Rey, Chris P Sammons, Deanna M Sanders, Katherine E Seager, Kyle D Shimmin, Cara M Thistlethwaite, Matthew J Wakefield, Kyle M Young, Dana J ZookAdvisor(s): Barbara H John
Economics and Finance — 8:00 AM-1:00 PM
Course Project, 12_SP_ECO_346_01 — Miriam Hall -103

Markets and organizations are often celebrated for their potential to achieve harmony (efficiency and socially optimal outcomes). The corollary is that any interference with market mechanisms and organizational imperatives should be contemplated with caution. But success often depends on the course of human events being predictable enough to permit human institutions to achieve stable and desirable, if not durable, outcomes. If human behavior is not rational or predictably irrational, both markets and organizations may fall short of achieving optimality. Traditional violations such as the presence of external effects or market (monopoly and monopsony) power have always been invoked to justify government intervention. But the new work in behavioral economics implies yet more ways that regulation may be rationalized. The recent history of bubbles and panics, for example, recommends that we revisit conventional postures against regulation of financial markets. This presentation will consist of a montage of instances--historical, theoretical, hypothetical and actual--that invite us to revisit the issue of government regulation of economic institutions: markets and firms.

Buy, Sell or Hold: An In-Depth Look at the Flyer Fund Security Selection Process

Presenter(s): Erica M Kleinman, Natalie J McGregor, Corey R Pryor, Kelsey E Stroble
Advisor(s): Robert D Dean, John E Rapp
Economics and Finance — 11:00 AM-12:00 PM
Independent Research — Miriam Hall - 118 (Davis Center)

The Flyer Fund holds on average 55 mid to large-cap stocks, each of which undergoes a stringent fundamental evaluation with periodic updates. The purpose of this presentation is to provide an in-depth look at the Flyer Fund stock selection process, including the identification of the key fundamental factors that determine if a stock is selected or not for the Flyer Fund. Also included in the presentation is the identification of the primary sources of financial information/data used by the security analysts responsible for buying or selling stocks. Stocks currently under consideration for the Flyer Fund will be used to explain the selection process.

The U.S. Economic Outlook for 2012 and Flyer Fund Sector Weights

Presenter(s): David P Beyerle, Michael R Groff, J Ross Hallman, Tyler C Hujik
Advisor(s): Robert D Dean, John E Rapp
Economics and Finance — 1:00 PM-2:00 PM
Independent Research — Miriam Hall - 118 (Davis Center)

The Flyer Investments Fund uses a top-down investment approach to determine which of the 10 S&P 500 Sectors it plans to overweight, underweight, or marketweight. The purpose of the presentation is to describe this top-down approach and how it relates to past, present, and projected future economic conditions in the U.S.. Topics to be discussed are (1) U.S. Economic Indicators, (2) Sector Weights, and (3) Economic Outlook Analysis.

ROA and ROE as Determinants of Quality in Portfolio Management

Presenter(s): Joseph J Capka
Advisor(s): Robert D Dean, John E Rapp
Economics and Finance — 2:20 PM-2:40 PM
Honors Thesis — Miriam Hall - 213

Does Quality Matter? Since 1956, Standard & Poorâs has offered a rating system that differentiates stocks by quality, known as its Quality Rankings. From S&P's perspective, quality is a function of the growth and stability of earnings and dividends over time. While a number of past studies have concluded that stocks with a high quality ranking tend to outperform the market, some studies have identified variability among rankings, which suggests that a more complete set of ranking criteria is needed. In my study, I have tested the hypothesis that both Return on Equity (ROE) and Return on Assets (ROA), when considered as criteria for portfolio construction, generate additional performance above the S&P 500. Through an analysis of hypothetical portfolios of quality-ranked stocks, I have concluded that both ROE and ROA are additional determinants of quality and hence portfolio performance.

Do Dividends Matter: An empirical analysis of the impact of dividends on portfolio stock selection, portfolio weights, and portfolio returns for S&P 500 stocks over the period 2005-2010

Presenter(s): Gregory J Castell
Advisor(s): Robert D Dean, John E Rapp
Economics and Finance — 2:40 PM-3:00 PM
Honors Thesis — Miriam Hall - 213

Because of a growing number of dividend-focused portfolios today, the critical issue is whether or not these types of portfolios create alpha. Therefore, the purpose of this study is to determine if a portfolio of stocks focused on dividends can create alpha (i.e. excess returns) in both declining and rising stock markets. Holding constant such key factors as valuation, earnings growth, and profitability, at the margin, I have assumed the critical dividend factors in determining alpha are dividend yield, dividend growth, and dividend payout ratio.To test the hypothesis that one

or a combination of the above dividend factors can contribute to a portfolio's alpha, I will develop a "baseline" portfolio that has these general parameters: [1] the stocks in the portfolio will have Price to Earnings Ratios below the market, [2] their expected growth rate in earnings is greater than the market, and [3] the return on common equity will be higher than the market. The stocks in the baseline portfolio will then be weighted respectively by their dividend yield, dividend growth rate, and dividend payout ratio for the periods 2005-2010, allowing for yearly rebalancing. The portfolio returns will be compared to the S&P 500 market returns over the same time periods to determine if alpha was created. I will also calculate information ratios for the various dividend portfolios to determine risk-adjusted excess returns.

Modeling the Optimal Asset Allocation Based on the Markowitz Modern Portfolio Theory

Presenter(s): Jonathan W Castleton, Christopher K MacIno
Advisor(s): Ting J Zhang
Economics and Finance — 3:40 PM-4:40 PM
Course Project, 12_SP_FIN_460_01 — Miriam Hall - 213

We will utilize Excel to model the optimal portfolio asset allocation based on the Modern Portfolio Theory developed by Nobel Laureate Henry Markowitz. The research question is: Given a certain level of an investor's risk aversion, what is the optimal asset allocation that will generate the highest utility? Following Markowitz's mean-variance (M-V) framework, we will analyze the tradeoff between risk and return for a portfolio containing two financial assets; namely, stocks and Treasury bonds. We will first estimate the mean, variance, and the correlation for the returns on the two assets based on historical monthly data from 1926 to 1994. Next, we will construct the efficient frontier, which represents a set of portfolios with various asset mixes between stocks and Treasury bonds that maximizes the expected portfolio returns at each level of portfolio risk (or conversely minimizes the portfolio risk at each level of the expected portfolio return). Toward this end, we will utilize the Excel Solver function to minimize the standard deviation (or variance) of the portfolio, by choosing the optimal asset weights for stocks and Treasury bonds, subject to an investor's budget constraints. The minimum variance portfolio (MVP) will also be identified. Finally, we will consider an investors' risk preference (measured by the risk aversion coefficient or ^{3}) to determine the optimal portfolio asset allocation that will maximize the investor's utility. This project represents a direct application of the well-known Markowitz Modern Portfolio Theory, which has been widely used by the investment industry. A number of studies have shown that the asset allocation theory, on average, can explain over 90 percent of the variability of the total return of a portfolio. This project arguably has important practical applications as it can assist both individual and institutional investors in achieving their investment goals by determining the optimal asset allocation.

MANAGEMENT AND MARKETING

The P&G Marketing Challenge

Presenter(s): Megan E Christy, Elizabeth C Leavy, Carolyne R Nebel, Martha V Sitkiewicz
Advisor(s): Irene J Dickey
Management and Marketing — 2:20 PM-3:20 PM
Independent Research — Miriam Hall - 214

Each semester one of Procter & Gambles 300 brands and their brand managers sponsor this unique and intense competition between four teams of our best marketing students. Students compete to get a spot in the competition then compete against other teams to help this brand achieve its business goals. Students are given an actual marketing problem or opportunity and participate in a P&G "onboarding" where they are exposed to confidential corporate data and information. They then work all semester, engaging in extensive research in order to develop recommendations that are viable, actionable, unique and will accomplish the business goals defined by P&G. P&G implements many student recommendations. See some of the amazing work that UD SBA students do!

Kosovo, The Young Europeans: An in-depth study of the effect that the National Branding Campaign has had on the Kosovar Population

Presenter(s): Annea Hapciu
Advisor(s): John R Sparks
Management and Marketing 3:00 PM-3:20 PM
Honors Thesis Miriam Hall - 213

This thesis analyzes' the effect that, Kosovo: The Young Europeans, the country branding campaign primarily geared towards transforming perceptions of the international community towards Kosovo and its people, had on the current Kosovar population. The aim of the study involved assessing whether the campaign affected feelings of patriotism, optimism, satisfaction and justice amongst the Kosovar people. Furthermore, this thesis analyzes whether or not the national branding campaign has stimulated and instilled pro-social behaviors- voting, protesting and entrepreneurship- within them. The primary research study included five hundred surveys and interviews in five major regions in Kosova as well as a portion of online questionnaires.

MIS, OM AND DECISION SCIENCES

OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 1 of 3

Presenter(s): Meredith F Baer, Andrea M Broge, Elizabeth A Elisha, Megan K Hartmann, Daniel T Jacob, Heather N Jorgensen, Steven J Kaminski, Zachary M Kaylor, Timothy S Kott, Erin E Kraska, Thomas P Marx, Benjamin T Miller, Coriana J Mossburg, Jonathan C Schneider
Advisor(s): Michael F Gorman, John J Kanet
MIS, OM and Decision Sciences 11:00 AM-12:00 PM
Senior/Capstone Project Miriam Hall - 104

Teams of Operations and Supply Management seniors report on the results of their operations consulting projects with regional firms.Part 1 of 3.

Become a world citizen with the School of Business Administration Summer Study Abroad, Semester Exchange, ETHOS (Engineers in Technical Humanitarian Opportunities of Service Learning, and other programs.

Presenter(s): Charles B Edmundson, Wyatt P Elbin, Marie C Foy, Elizabeth P Gianaras, Thomas M Hanson, Wolfgang J Herb, Jonathan C Phipps, Jeanne M Zeek
Advisor(s): Peter G Wagner
MIS, OM and Decision Sciences 11:00 AM-2:00 PM
Independent Research Miriam Hall - 119 (O'Leary)

University students increasingly realize that international experience is almost a prerequisite for securing a first-rate job after graduation, and that learning about and understanding diverse cultures make us all better world citizens. How can you as a student expand your horizons while still maintaining a high level of academic professionalism? SBA international programs that include Summer Study Abroad, Semester Exchange, and ETHOS (co-sponsored by the SBA and the Department of Engineering), to name a few, provide opportunities for students to become world citizens by embracing unfamiliar and diverse cultures in rigorous educational environments that can include service activities. This presentation will inform students on becoming a more educated citizen through a study abroad and/or service experience in Europe, Asia, Central or South America, and more. Students may take business and general education classes taught by University of Dayton faculty or take a foreign language. Opportunities for service activities through ETHOS engage students in life-changing experiences while giving back to the global community. Past program participants will present their stories and discuss the unique opportunities awaiting students in all majors.

Goodrich Test Lab System

Presenter(s): Brock D Griffey, John R Kellner, Kyle D Speicher, Michael J Teodosi
Advisor(s): Harvey G Enns
MIS, OM and Decision Sciences 1:00 PM-1:15 PM
Senior/Capstone Project Miriam Hall - 207

Our objective in this project was to streamline an existing information processing system that is used to test equipment used in airplanes in Goodrichâs Test Lab. The application we have designed is web-based and has been created via Windows Server 2008, so it will be accessible through a company intranet site.

OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 2 of 3

Presenter(s): Peter M Biondi, Ryan T Burg, Kathryn C Chapman, Matthew E Crawford, Alexander M Galluzzo, Anne M Globig, Lindsey M Hausmann, Gregory B Hayes, Bryce J Huelsman, Eric P Lopez, Patrick J Murphy, Corey J Puthoff, James R Russell, Gregory A Wiegand, Benjamin W
Advisor(s): Michael F Gorman, John J Kanet
MIS, OM and Decision Sciences 1:00 PM-2:00 PM
Senior/Capstone Project Miriam Hall - 104

Teams of Operations and Supply Management seniors report on the results of their operations consulting projects with regional firms.Part 2 of 3.

itelligence Project Management System

Presenter(s): Jordan D Adams, Christina R Chapman, Justin M Hinders, Michael R Oberschmidt
Advisor(s): Harvey G Enns
MIS, OM and Decision Sciences 1:15 PM-1:30 PM
Senior/Capstone Project Miriam Hall - 207

Our system is designed in Microsoft Project Server to help itelligenceâs clients understand what is being done within a project. Our system will provide the client with the information needed to know where the project stands from a scheduling perspective, needed or anticipated resources, whether or not the project is on the critical path, and if the project is on or over budget. The system will provide a Gantt chart, which shows an overall context of how long a given task takes, and the necessary predecessor tasks. The system will also provide different reports, which will let the client know whether or not the project is on schedule. The system is foremost a template that project managers will use in a given project.

ISUS Social Media System

Presenter(s): Zachary R Frey, Joshua T Koenig, Emil B Kwarteng, David A Payerle
Advisor(s): Harvey G Enns
MIS, OM and Decision Sciences 1:30 PM-1:45 PM
Senior/Capstone Project Miriam Hall - 207

Improved Solutions for Urban Systems (ISUS) is a high school that targets drop-out youth, giving them a second chance to get the skills they need to succeed in life. It is currently seeking methods to reach out to new students, as well as engage their current students. The goal of our team is to use Social Media outlets (e.g., Facebook, twitter) to connect to these youth to promote interest and involvement in the ISUS community. It is ISUS hope that student enrollment and retention will increase as a result of the system.

T & T Graphics Customer Ordering System

Presenter(s): Brianna N Gove, Amy E Hagner, Namrata Haritashya, Elizabeth M Weeman
Advisor(s): Harvey G Enns
MIS, OM and Decision Sciences 1:45 PM-2:00 PM
Senior/Capstone Project Miriam Hall - 207

Our team is working with T&T Graphics to create an online customer ordering system (COS) that will also supply inventory information to managers. The COS will include a calculator to help managers calculate appropriate inventory levels, prices, etc. This COS is being created in WordPress (WP). Specifically, this system will aid in differentiating T&T Graphics, as well as further developing their customer loyalty.

Goodrich Customer Information System

Presenter(s): Katharyn L Balbach, David P Bauer, Alexander K Clapp, Steven W Galli, Kathryn A Robbins
Advisor(s): Harvey G Enns
MIS, OM, & Decision Sciences 2:20 PM-2:40 PM
Senior/Capstone Project Miriam Hall - 207

The Goodrich CIS team is developing a replacement Customer Information System for the Goodrich Corporation that improves upon the functionality and capabilities of their current system. They use the system to track customer information as well as creating "events," which range from a Christmas card to an invitation to an air show. The new system will be able to work with Excel to create mailing labels and sync with Outlook, allowing the data to be kept consistent throughout the business. Overall layout and design will also be improved by presenting information through a more logical and clean web front end.

OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 3 of 3

Presenter(s): Brett A Anton, Sean T Belanger, Andre B Crawford, Nicholas A Dolecki, Brianna N Gove, Steven J Group, Matthew J Kaiser, Abigail A Lundy, Bryan P Misencik, Daniel J Niese, Benjamin F Oren, Jared L Rogers, Katherine N Schuster, Jared R Steinmetz, Travis D T
Advisor(s): Michael F Gorman, John J Kanet
MIS, OM and Decision Sciences 2:20 PM-3:20 PM
Senior/Capstone Project Miriam Hall - 104

Teams of Operations and Supply Management seniors report on the results of their operations consulting projects with regional firms.Part 3 of 3.

Superior Abrasives Enterprise Resource Planning System

Presenter(s): Kyle G Graves, Patrick G Seggerson, Kyle R White, Shane X Wong Kung Fong
Advisor(s): Harvey G Enns
MIS, OM and Decision Sciences 2:40 PM-3:00 PM
Senior/Capstone Project Miriam Hall - 207

Superior Abrasives has contracted our group to identify an Enterprise Resource Planning (ERP) system to replace their current software. This new system will support their manufacturing and distribution operations by providing features such as inventory management, job scheduling, shipping, and customer relationship management. The first half of our project involved documenting the client's processes and developing requirements for the new system. During the second phase of the project, we identified potential ERP systems and evaluated their fulfillment of the client's business requirements. Based on the results from this evaluation, we developed a recommendation of the optimal ERP system.

PHP Service Catalog Project

Presenter(s): Jennifer A Gaboutou, Daniel E Kelly, Elizabeth C Ranz, James M Temme
Advisor(s): Harvey G Enns
MIS, OM and Decision Sciences 3:00 PM-3:20 PM
Senior/Capstone Project Miriam Hall - 207

Our team has gone through the process of planning, developing, implementing, and maintaining three service catalogs to better help Premier Heath Partners (PHP) service their needs. All catalogs were developed through the 2007 Microsoft SharePoint software. The developed catalogs provide PHP with easy-to-use applications that help simplify different questions or issues that can arise from either internal customers or employees. Furthermore, the application provides consistently updated and maintained catalog(s) that helps lessen erroneous requests. In summation, the developed service catalogs allow PHP to see increases in employee productivity and improvements in their customer support capabilities.

SCHOOL OF EDUCATION AND ALLIED PROFESSIONS

EDUCATIONAL LEADERSHIP

Facebook Use Among Undergraduate Students at The University of Dayton: Creating and Sustaining Community

Presenter(s): Karen L Abney Korn
Advisor(s): Carolyn S Ridenour, Molly A Schaller
Educational Leadership 1:00 PM-1:20 PM
Graduate Research LTC - Forum

This presentation is a result of dissertation research funded by The University of Dayton Dissertation Fellowship in 2011-2012. It employs qualitative data on the Facebook activity of 13 undergraduate students over a six-month period at The University of Dayton. The primary question guiding this research is: How do college students use Facebook to fulfill social needs in the creation and sustentation of community while attending college? I examine the way students employ Facebook to: [1] fulfill social needs in the creation and sustentation of community; [2] shape their experience of community on campus; [3] understand and define the importance of community in both face-to-face and online relationships. This study employs a methodology called netography (Kozinets, 2010). Netography, according to Kozinets, "is participant-observational research based in online fieldwork. It uses computer-mediated communications as a source of data to arrive at the ethnographic understanding of representation of a cultural or communal phenomenon" (p. 60). As such, the researcher engaged with digital artifacts of student social engagement in the process of creating and sustaining community. This study provides examples of how students utilize Facebook to enhance and mediate their experience of community. It includes direct quotations from students on Facebook, and will demonstrate how students have employed new technologies to create connections, establish social memberships, and foster involvement on campus. It also explains and illustrates exactly how students employ social media to enhance their college experience. Improved understanding of the usage strategies, perceptions, understandings and feelings of college students who use Facebook will allow administrators to better comprehend the student's perspective on community. Likewise, it will enable student support personnel to create campus programs that foster face-to-face community in ways that compliment and blend with online community rather than clash and counter existing online community structures.

HEALTH AND SPORT SCIENCE

History of Social Media and how they track it success

Presenter(s): Sarah M Wedel
Advisor(s): Peter J Titlebaum
Health and Sport Science 1:00 PM-1:20 PM
Independent Research LTC - Team Space

Since the introduction of social media sites, such as Facebook and YouTube, millions of users have integrated these sites into their daily routine. Social media is defined as a web-based service that allows individuals to (1) construct a public or semi-public profile within a bounded system (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by other within the system (Boyd, 2008).The history of social media is fairly brief. The first site, sixdegrees.com, launched in 1997, allowed users to create profiles and list their friends. Social media sites hit mainstream in 2003 with the launches of Myspace and LinkedIn. Shortly after, in 2005, Facebook, YouTube, and Xanga went global (Boyd, 2008). There has been little research done on the impact that social media has to generate revenue from corporate sponsorship of sports. There are many methods marketers use to track social media and measure the number of tweets, re-tweets, postings, impressions, comments, and blog entries. However, the underlying contribution to revenues is a question marketers should ask is whether the value of social media can be measured?

Understanding Best Practice of College Student Athletic Department Support Groups

Presenter(s): Daniel Brito, Jared N Dvorsky
Advisor(s): Peter J Titlebaum
Health and Sport Science 1:20 PM-1:40 PM
Independent Research LTC - Team Space

The purpose of this study was to recognize and highlight successful college student sport support clubs. The study was designed to identify trends in student groups that reflected how student groups organized, funded themselves, communicated, interacted with the teams, and attracted members to athletic events. Sporting events have become a major factor in choosing a college. Unlike professional sport teams that represent a city or state, college athletic departments represent a university. The ties that bind loyalty to a college are also different from affiliation to a professional team. Similar to professional sports, fans build a connection to their university, however a major difference between professional sports teams and collegiate sports teams is the involvement of the student body at collegiate games. Sporting events and sport-minded student groups are becoming a reason for prospective students to apply to a specific university. Student sections across the U.S. vary from college to college in size, structure, organization, and participation. Major conferences were studied from schools in the Big 10, Big 12, Big East and the Atlantic Coast. They have top level programs that are able to draw more students to games. Smaller conferences were also surveyed including the Atlantic 10, Horizon League, West Coast, and Colonial Athletic Association. These schools also want to learn how to gain the support of the student body. The article "Marketing the 'Big Game' Developing a Student Rewards Program in College Basketball" (Peetz, 2011) provides a model that colleges can use to influence students to attend low-profile sporting events by rewarding attendance. College athletic departments should be aware of best practices to effectively organize student support groups and create a successful student plan targeted to the entire student body.

PHYSICAL THERAPY DOCTORAL PROGRAM

The Influence of Specific Gait Modifications on Medial Knee Loading and Metabolic Cost

Presenter(s): Lydia K Caldwell
Advisor(s): Joaquin A Barrios, Lloyd L Laubach
Physical Therapy Doctoral Program 3:00 PM-3:20 PM
Graduate Research Kennedy Union - 331

The knee external adduction moment (KEAM) has been linked with both the severity and progression of medial knee osteoarthritis. Simple gait modifications including increased foot progression angle, medialization of weight at the foot, and increased trunk lean have been found to reduce the KEAM. What have not been evaluated are the potentially increased metabolic costs of such interventions. Therefore, the purpose of this study was to evaluate the gait mechanics and steady state energy expenditure associated with these gait conditions. Twelve healthy adults (6 male, 6 female; age: 21±1.7; BMI: 22.4±1.5) were recruited for this study. An 8-camera Vicon (Oxford Metrics, UK) motion analysis system (100 Hz) and floor-mounted force plate (Bertec Corp., Worthington, OH, USA) (1500 Hz) were used to record walking mechanics along a 23m pathway. A 10 minute treadmill trial was used to assess steady state energy expenditure. Volumes of oxygen consumption and carbon dioxide production were measured using indirect calorimetry with 30-s averaging (TrueMax, 2400, Parvo Medics, Sandy, UT, USA). Increasing lateral trunk lean by an average 16.6 degrees resulted in a 31% reduction in the first peak of the KEAM ($p < 0.001$). Increasing FPA by an average of 11.2 degrees led to a 32% reduction in the second peak of the KEAM ($p < 0.001$). All three modifications significantly increased metabolic cost. Toeing out led to a 2.6% increase in energy expenditure ($p = 0.039$). Trunk lean led to an 11.3% increase in energy expenditure ($p = 0.001$), and medial shift led to an 11.9% increase in energy expenditure ($p < 0.001$). The goal of the intervention must be acknowledged when considering a gait modification. The importance of load reduction versus metabolic cost can play a substantial role in the clinical decision making process.

Varus Knee Alignment and Gait in Healthy College-Aged Females

Presenter(s): Danielle E Bare
Advisor(s): Joaquin A Barrios, Margaret F Pinnell
Physical Therapy Doctoral Program — 4:20 PM-4:40 PM
Honors Thesis — Kennedy Union - 211

Osteoarthritis (OA) is a degenerative bone and cartilage disease characterized by joint pain and stiffness. The most common form of OA is that of the inside aspect of the knee, often termed medial knee OA. In the absence of trauma or other injury, medial knee OA is thought to occur due to excessive loads to inside aspect of the knee. Varus knee alignment imposes greater medial knee loads in comparison to more neutrally aligned knees. It is thought that males have a greater propensity for varus knee alignment. However, females have a greater prevalence of medial knee OA. In a previous study, our research group determined that many of the frontal plane gait alterations observed in established medial knee OA are present in individuals with varus alignment. However, this previous study recruited a predominantly male cohort, and thus the results can not be generalized to females with varus alignment that may develop disease. Therefore, the purpose of this study is to present a gender comparison of gait mechanics in healthy individuals with varus alignment. Gait mechanics from 15 asymptomatic females were recorded and compared to the gait mechanics of the previously collected 15 asymptomatic males. The groups were matched for degree of varus tibial alignment. Variables of interest included known gait mechanics that have been previously associated with medial knee OA in the medical literature. Differences in these gait mechanics were observed only in the frontal plane, despite matching tibial frontal alignment between the groups. Females exhibited greater hip adduction angles (p=0.001) and moments (p=0.016), while males exhibited greater dynamic knee varus angles (p=0.007). Interestingly, knee varus moment was not different, nor were any sagittal plane variables. These results suggest that frontal plane differences may relate to more proximal and gender-specific anthropometrics such as greater pelvic width in females.

TEACHER EDUCATION

Inclusive Instruction: A New Approach to Accessibility

Presenter(s): Russell A Thomas
Advisor(s): Joseph L Watras
Teacher Education — 1:00 PM-1:20 PM
Graduate Research — LTC - Studio

The Inclusive Instruction Project has as its goal, the success of the University of Dayton at meeting its legal and ethical obligations of accessible instruction. The Project team brings together the fields of education and technology to develop a means of overcoming the current barriers to designing and implementing an inclusive educational environment. In doing so, the team has developed a new way of thinking about accessibility, a reconceptualization that overcomes the most obtrusive barriers to the university's success in this area.The Project bases its adoption of this new way of thinking on the conceptual transformations that have occurred in higher education over the past few decades. The paradigmatic transformations in thinking about the teacher and teaching owe a great debt to the works of individuals like Boyer, Barr, and Tagg. Their writings were the catalysts for an expanded view of the professor as more than merely teacher, and focused the attention of education on the student's learning rather than on the teacher's teaching.The Inclusive Instruction Project builds on these reconceptualizations by asking educators to expand their view of the student. The Stander Symposium is the first of many efforts to introduce this transformative view to the University of Dayton community. The Project team will ultimately work with faculty and administrators to consider their work in light of a student body that has grown in diversity due to changing demographics and technological advances. The team introduces faculty to the values of adopting accessibility standards, beyond those of the legal and ethical.In an educational environment rife with increased productivity demands, a transformation of mindset and practice around the issue of accessibility is vital. The Inclusive Instruction Project has as its mission to act as a catalyst for this change.

SCHOOL OF ENGINEERING
CHEMICAL AND MATERIALS ENGINEERING

CANCELEDEngineering Therapeutic VNP Formulations for Applications in Cancer Therapy

Presenter(s): Mary J Ryan
Advisor(s): Donald A Comfort
Chemical and Materials Engineering 1:00 PM-1:20 PM
Honors Thesis Kennedy Union - 211

Most cancer therapies in use today result in adverse side effects to the patient. New technologies aim to reduce these side effects by targeted delivery of the drugs directly to the cancer cells, thereby minimizing many harmful side effects, such as the collateral death of healthy cells along with diseased cells. To achieve this, virus-like particles (VLPs) were engineered to serve as the backbone for cancer drug delivery systems. These VLPs were modified by addition of 1) a targeting molecule to locate the cancer, 2) a fluorescent tag to confirm affinity for cancer cells, and 3) a drug for killing the cancer cells. Results showed that these molecules could be easily and efficiently modified. Preliminary results show that the particles can be taken up by cells and that the particles can kill cancer cells.

Engineering Therapeutic VNP Formulations for Applications in Cancer Therapy

Presenter(s):
Advisor(s): Donald A Comfort
Chemical and Materials Engineering 1:20 PM-1:40 PM
Honors Thesis Kennedy Union - 211

Most cancer therapies in use today result in adverse side effects to the patient. New technologies aim to reduce these side effects by targeted delivery of the drugs directly to the cancer cells, thereby minimizing many harmful side effects, such as the collateral death of healthy cells along with diseased cells. To achieve this, virus-like particles (VLPs) were engineered to serve as the backbone for cancer drug delivery systems. These VLPs were modified by addition of 1) a targeting molecule to locate the cancer, 2) a fluorescent tag to confirm affinity for cancer cells, and 3) a drug for killing the cancer cells. Results showed that these molecules could be easily and efficiently modified. Preliminary results show that the particles can be taken up by cells and that the particles can kill cancer cells.

Model Formulation and Simulation of a Solid-State Lithium-Based Cell

Presenter(s): Muneeb Ur Rahman Shaik
Advisor(s): Sarwan S Sandhu
Chemical and Materials Engineering 1:20 PM-1:40 PM
Graduate Research LTC - Studio

The analytical formulation was developed to predict the performance of a Lithium Anode/Lithium-Insertion Cathode cell. Specifically,the formulation of analytical expressions to calculate the reversible cell voltage will be presented.

Smart Design of Carbon Engineered Tissue Scaffolds

Presenter(s): Jarema S Czarnecki
Advisor(s): Khalid Lafdi, Panagiotis A Tsonis
Chemical and Materials Engineering 4:20 PM-4:40 PM
Graduate Research Kennedy Union - 312

Carbon materials are attractive candidates for tissue scaffold applications because of their biocompatibility and versatile mechanical properties. Varying crystallinity and surface modification through activation and functionalization may enhance osteoconductivity and lead to the development of tunable scaffold constructs. Three types of carbon fibers and two types of carbon nanofibers were used in this study. Carbon materials were subjected to C02 activation, oxygen, amine and molecular grafting functionalization. Materials were characterized by X-ray diffraction,

Raman spectroscopy, and BET techniques. In vitro studies were performed in order to investigate the cellular attachment and proliferation of osteoblasts on carbon surfaces. Results showed that cell proliferation is strongly dependent on crystallinity, orientation, surface roughness, and BET surface area. Amine-based grafting molecules inhibited osteoblast proliferation. However, both oxygen and acid-based grafting molecules promoted cell growth. This effect was more pronounced with longer grafting molecules. A Cellular Automata model was developed as a predictive design tool.

CIVIL AND ENVIRONMENTAL ENGINEERING

Department of Civil and Environmental Engineering and Engineering Mechanics Senior Capstone Presentation: Miami Valley Pointe

Presenter(s): Gina M Balsamo, Mark J Barga, Aaron P Berry, Matthew D Carroll, Timothy P Dengler, Kyle R Dobbins, Peter J Doster, Philip K Dresden, Thomas P Foreman, David L Frey, Joseph A Gayda, Daniel J Griest, Taylor R Harris, Aaron Kahlig, Mark W Lee, Lindsie R MacP

Advisor(s): Donald V Chase

Civil and Environmental Engineering and Engineering Mechanics — 9:00 AM-12:00 PM

Senior/Capstone Project — Kennedy Union Boll Theatre

This project represents the work of the graduating class from the Department of Civil and Environmental Engineering and Engineering Mechanics. The class will be presenting conceptual and design work pertaining to land recently annexed by the City of Centerville from Sugarcreek Township of what was formerly the property of the Dille family. The new development has been named Miami Valley Pointe by the students. The property is located in Greene County, bounded to the north by Interstate 675, to the west by Wilmington Pike, and to the south and east by Clyo Road. The work done by the 2012 Capstone Class includes site layout and design of an extension of Miami Valley Drive through the property, as well as an acute care center and associated site development features. The presentation will last approximately three hours.

ELECTRICAL AND COMPUTER ENGINEERING

Memristor Device Modeling and Circuit Design

Presenter(s): Christopher G Yakopcic

Advisor(s): Tarek M Taha

Electrical and Computer Engineering — 1:20 PM-1:40 PM

Graduate Research — Kennedy Union - 222

The memristor is known as the fourth fundamental two-terminal passive circuit element (the others being the resistor, capacitor, and inductor). The memristor was first theorized by Dr. Leon Chua in 1971, and the first successful fabrication of the device was published by a research team led by Dr. Stanley Williams at HP Labs in 2008. The memristor has unique properties including the ability change resistance based the amount of charge flowing through the device, and more importantly the ability to retain its resistance state after the power is removed from the device. These properties have led researchers to believe that this device can be used to approximate the effect of a synapse in neuromorphic computing architectures. The synapse is a component of brain tissue that provides a connection with variable strength between neurons. Just as the memristor can change its resistance state based on total charge through the device, the synapse has a variable connection strength based on the number of neuron spikes that have been applied to another neuron through a given synapse. This presentation will discuss work completed thus far in memristor device modeling and electronic circuit simulation and design. The memristor device model was developed so that circuit simulations can be completed using a memristor model that can accurately match the IV characteristic of several published devices. Circuit designs have been completed that show how memristor devices can be used as memory components in both neuromorphic and traditional computing systems. It will also be demonstrated through simulation and electronic characterization how well the memristor can model a synapse.

Corrupted Reference Image Quality Assessment

Presenter(s): Wu Cheng
Advisor(s): Keigo Hirakawa
Electrical and Computer Engineering 1:40 PM-2:00 PM
Graduate Research Kennedy Union - 312

Image distortion could happen for many reasons, for example, quantization, noise, blur, and artifact. Hence it is necessary and important to assess the quality of the restored images objectively.In general, the ideal image (pure image without noise or reference image) is required for computational image quality assessment. However, due to the fact that most quality assessment metrics reduce to a few key statistics that can be estimated from the corrupted image (observed distorted image) provided, we could compare and score the quality of corrupted image even when the ideal image is not given. We aim to design an image quality assessment (IQA) metric that scores the similarity between the corrupted and ideal images without direct access to the latter. And we call it âcorrupted reference quality assessmentâ (CR-QA).Image quality is a fundamental and practical problem in digital imaging. Most image quality assessment metrics today are âfull reference quality assessmentâ (FR-QA) which requires the reference image. This limits the utility of IQA to only a few imaging applications where reference is known. The CR-QA is an entirely new typed IQA that does not require reference image. It allows IQA to be used in applications no possible before and leverage successes of FR-QA but without its disadvantages.

A Fast and Adaptive Technique for Hazy/Foggy Image Enhancement

Presenter(s): Sai B Arigela
Advisor(s): Vijayan K Asari
Electrical and Computer Engineering 3:40 PM-4:00 PM
Graduate Research Kennedy Union - 311

The images/video captured in bad weather conditions like haze and fog will suffer from poor visibility, which is one of the main reasons for performance degradation of outdoor vision systems. The current advanced outdoor vision systems like traffic monitoring, surveillance and intelligent vehicle systems assume that the input image is clear image i.e. a clear weather image (all the details are clearly visible). In bad weather, this is not the case. The haze or fog particles will obstruct the visibility so the features of the desired object in a scene are not clear. The traditional image enhancement algorithms failed to improve the visibility because the haze or fog scene will depend on the depth information of the scene. The existing model based algorithms to solve this problem take more processing time and are not suitable for real time applications. This research proposes a new algorithm that estimates the thickness of haze (using relative depth information) of a scene from physics based model and modify its histogram using a nonlinear transfer function and its parameters are estimated adaptively based on the local image statistics. This is an automatic technique and takes less computation time. This algorithm can be applied to improve the visibility of aircraft runway for safe landing in bad weather conditions.

ELECTRO-OPTICS GRADUATE PROGRAM

Novel wiregrid micropolorizers for visible wavelength polarimetry

Presenter(s): Yu Wang
Advisor(s): Andrew M Sarangan
Electro-Optics Graduate Program 1:40 PM-2:00 PM
Graduate Research Kennedy Union - 211

The purpose of this work is to design, fabricate and study the properties of high aspect ratio micropolarizer for visible wavelength imaging, which could provide real-time polarimetric information from a conventional imaging system. The design and analysis of the micropolarizer is conducted with the rigorous coupled-wave analysis (RCWA) which will be done by matlab, RCWA is a fast, flexible optical grating solver. It calculates an exact solution to the Maxwell equations for the diffraction of light from an optical grating, with arbitrary profile and materials. Our fabrication processes will use deep-UV laser interference lithography (DUVLIL) technology with a 532-nm laser source. After we fabricate the sample, we will test its extinction ratio (ER) and transmission performance to compare with the result from RCWA analysis.

MECHANICAL AND AEROSPACE ENGINEERING

Approaches to Achieving Community Energy Reduction: Business Outreach in Rust Belt Cities

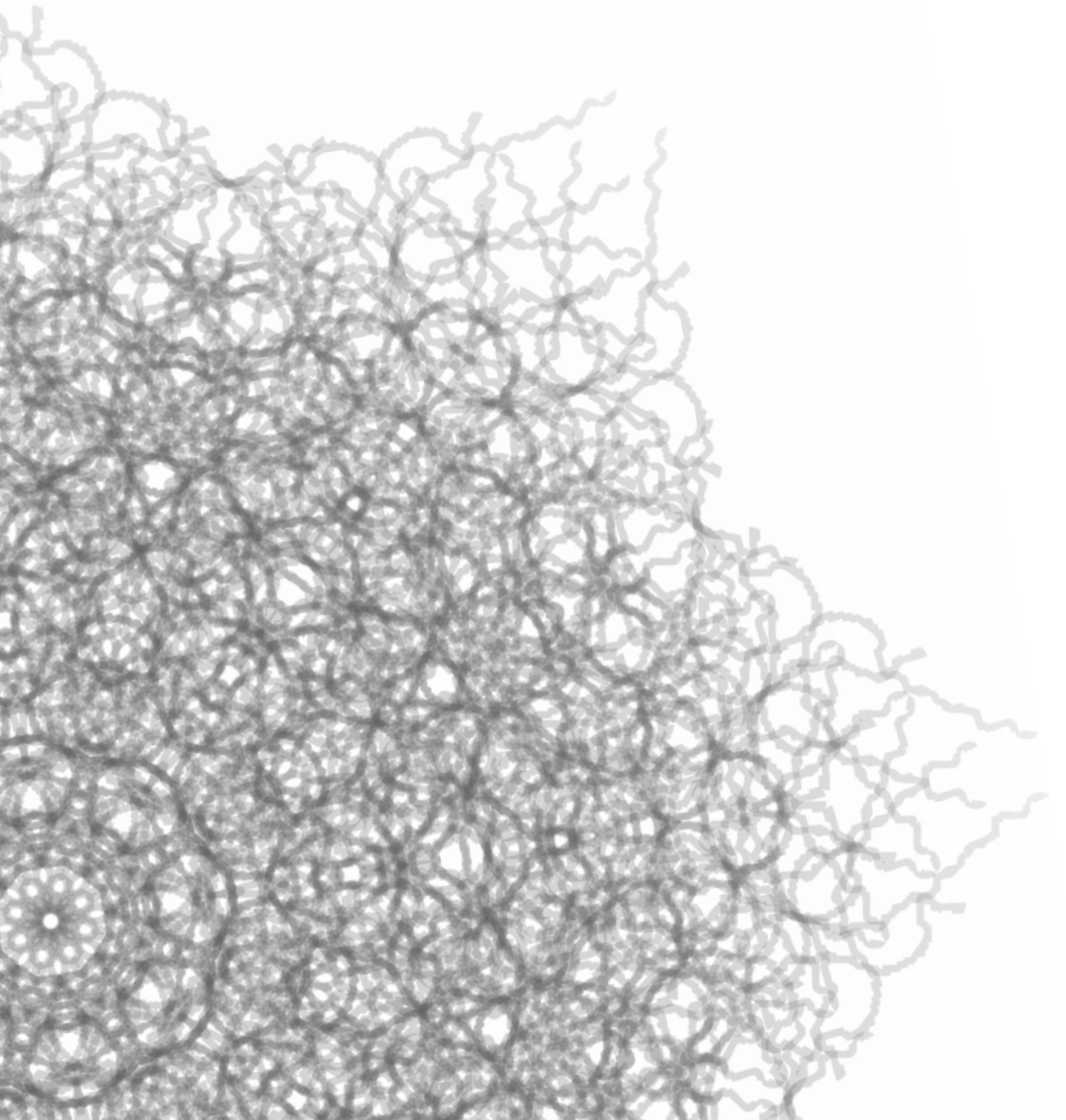
Presenter(s): Adam J Ferguson
Advisor(s): Kevin P Hallinan

Mechanical and Aerospace Engineering, Clean Energy — 2:00 PM-2:20 PM
Honors Thesis — Kennedy Union - 312

Energy independence, climate change, natural resource depletion and a variety of other reasons have pushed cities to think about how they must transform their energy systems to adapt to diverse challenges now and in the future. Governments, utility companies, businesses and non-profit organizations have offered solutions that seek in some way to transform their regionâs energy system. These approaches include all types of community education, financial tools, business networks, sustainable designations, incentive programs and more. This study aims to sort through those many solutions and to begin organizing them for analysis. Specifically, the study looks at business outreach in Rust Belt cities such as Dayton, Cleveland, Pittsburgh and Detroit that aims to reduce a community's energy use and encourage sustainable practices. This presentation will provide an update on the progress of the study to be completed in Fall 2012.

Panel Discussions & Other Formats

WEDNESDAY, APRIL 18, 2012
9AM TO 5PM



PANEL DISCUSSIONS

COLLEGE OF ARTS AND SCIENCES

MATHEMATICS

The Future of Sustainable Practices in Campus Buildings: Using a Systems Approach for Decision Making

Presenter(s): Anthony T Whaley
Advisor(s): Donald L Pair
Arts & Sciences-Office of Dean — 1:00 PM-2:00 PM
Course Project, 12_SP_ASI_345_01 — Science Center - 114 (Auditorium)

Water resource issues will be an integral part of future development decisions in the region, including at the University of Dayton. To date, discussions around sustainability and water resources at the University have lacked a strong shared vision between students, faculty, staff and administrators. A systems thinking approach to projects has been applied to four proposed facilities projects. By analyzing these four projects, it will be demonstrated how we can create a more efficient and sustainable future for our University. In the first portion of the presentation, the systems thinking method will be explained and shown why its implementation on our campus is beneficial to everyone. Following an overview of the four proposed projects, a panel discussion involving students, faculty, staff and administrators will examine the possible future of sustainable facilities and water resource practices at the University.

ENGLISH

Perspectives on American & Ojibwe Writer Louise Erdrich: stories, cultures, identities

Presenter(s): Lauryn A Bertke, Emily E Deeds, Matthew K Franklin, Soleil A Verse, Robin L Warshaw, Michael J Winn
Advisor(s): Sheila H Hughes
English — 3:30 PM-5:00 PM
Senior/Capstone Project — Kennedy Union - 310

Louise Erdrich, a finalist for the National Book Award (2001) and the Pulitzer Prize (2008), has written 13 novels, 3 books of poetry, 2 memoirs, and 6 books for children and young adults. Her work is informed by the rich and complex mixing of her French-Ojibwe and German-American ancestry, by both Catholic and Ashinaabeg spiritual traditions, and by the importance of story-telling, community, and identity in these cultures. Each of her novels offers a compelling, heart-breaking, and occasionally laugh-out-loud funny portrayal of characters struggling to make sense of their lives and sustain relationships and communities in times of change, uncertainty, and loss, and each stands alone as a "great read."Almost all of her novels also contribute, though, to the larger multi-generational saga of Ojibwe and Euro-American characters on and near the fictional "Little No Horse" reservation in North Dakota. In this panel, senior English majors will share their research on, insights about, and excitement for Erdrich's work in a series of brief (10 minute) presentations about various aspects of her fiction, followed by time for questions, comments, and discussion. No previous knowledge of Erdrich's fiction is necessary to understand or enjoy this panel, which is a project of the capstone seminar ENG 490: Louise Erdrich.

FITZ CENTER FOR LEADERSHIP IN COMMUNITY

Creating the RecBikes Program and Imagining the Future of Biking at U.D.

Presenter(s): Paul M Azzi, Gretchen A Berkemeier, Jennifer C Biette, Kristen G Crum, Molly C Daniels, Kristen R Diddle, Adam J Ferguson, Alexander M Galluzzo, Thomas M Hanson, McLean I Johnson, Sara M McCrate, Laura E Mustee, Bethany A Renner, Patrick J Rowe, Ann L Wedell, Kelly A Weisenborn
Advisor(s): Richard T Ferguson, Leslie W King
Fitz Center for Leadership in Community — 1:00 PM-2:00 PM
Senior/Capstone Project — Kennedy Union - 310

The 2012 Cohort of River Stewards capped their 3-year program with a project aimed at creating a pilot bike program for campus that would encourage students to discover Dayton, its places, and its rivers with a new perspective. After much collaboration with Campus Recreation and the advice of community partners, the RecBikes program was launched in Fall 2011. The 20 hybrid bikes and the popular red tandem bicycle have already carried hundreds of UD students beyond the edges of campus to discover the Dayton region's incredible bike routes, parks, markets and more. All are welcome to listen to the River Stewards' reflections on the project and participate in an idea session about the future opportunities and challenges for biking at UD.

HISTORY

The Gaelic Revival: Preservation of Irish Culture and Catalyst for Revolutionary Nationalism

Presenter(s): Jacob D Klemm, Joshua Q Rogerson
Advisor(s): Marybeth Carlson
History — 1:00 PM-1:30 PM
Course Project, 12_SP_HST_486_P1 — Marianist Hall Learning Space - 218

The Gaelic Revival was a period of renewed interest in traditional arts and pastimes in Ireland and in the preservation of the Gaelic language. In addition to restoring the Irish language and emphasizing Ireland's Gaelic heritage the Revival was closely tied to the Home Rule Movement and revolutionary groups such as the Irish Republican Brotherhood. Starting in the late 19th century a variety of organizations and social clubs arose to popularize and protect Irish traditions in opposition to the dominance of English culture which mirrored the political and economic dominance of Ireland by England. Musicians, poets, and authors including William Butler Yeats participated in a literary revival which championed Irish nationalism and celebrated Ireland's Gaelic heritage. The Gaelic Athletic Association brought Irish sports to the masses by organizing leagues and codifying official rules for traditional games, uniting the nation through recreation. The efforts of the Gaelic League brought the Irish language from the brink of destruction to a mandatory school subject in the Irish Free State established in 1922. Together these disparate cultural movements restored national pride to the Irish people and fueled the Home Rule movement and eventually the revolutionary nationalism which led to the Easter Rising and the formation of the first Dail. We will be discussing the origins of the Gaelic Revival, the cultural impacts such as developments in literature and language that it caused, and the connection between cultural nationalism and revolutionary nationalism.

History Matters: Research in Russian and U.S. History

Presenter(s): Lindsey E Cummings, Mallory C Hoos, Kimberly L Juhnke, Kiley M Mullane, Anne C Skuse, Jordan R Taylor
Advisor(s): Caroline W Merithew
History — 1:00 PM-2:00 PM
Senior/Capstone Project — Kennedy Union - East Ballroom

To be an historian, original research in primary sources and archival work is required. This panel features history majors' capstone work in the research seminars (Fall 2012) which focused on Russia in the Reign of Nicholas the II and Labor and Working Class History. The presenters work features key examples of how and why history matters.

Obstacles to Modernization in Ireland

Presenter(s): Stephanie M Moon, Aaron L Rankin
Advisor(s): Marybeth Carlson
History 1:30 PM-2:00 PM
Course Project, 12_SP_HST_486_P1 Marianist Hall Learning Space - 218

Ireland is often viewed by the world as a country on the margin. The nation's late industrialization and continued traditional cultural practices have led some historians to question whether Ireland is a fully modernized country. This presentation will attempt to discuss Ireland's (Northern Ireland and the Republic of Ireland) obstacles to modernization. More specially, the panel will focus on the issue of the troubles in Northern Ireland and how it has led to further strain on the already complex and fragile English-Irish relationship. Next, the presentation will investigate Ireland's abortion policies to determine if the position of women in the Republic of Ireland is limited compared to that of their male counterparts. Erma Bombeck once stated, "We've got a generation now who were born with semi-equality. They donÃ't know how it was before, so they think, this isn't too bad. We're working. We have our attach © cases and our three piece suits. I get very disgusted with the younger generation of women. We had a torch to pass, and they are just sitting there. They don't realize it can be taken away. Things are going to have to get worse before they join in fighting the battle." By and large Bombeck's quote is echoed on the ground in Ireland as the majority of women are discontent with their limited sexual autonomy and yet few have the courage to stand up and demand more. Likewise, the unstable English-Irish relationship has remained seemingly unchanged for centuries.

Ancient History and Modern Ideology

Presenter(s): Mallory C Hoos, Kiley M Mullane, Erin K Quinn, Jordan R Taylor
Advisor(s): Dorian Borbonus
History 2:00 PM-3:00 PM
Course Project, 12_SP_HST_304_01 Kennedy Union - West Ballroom

The popular saying "it's all just ancient history" implies that the distant past does not matter in the contemporary world. This attitude conceals the deep impact of antiquity on modern worldviews, ranging from quite deliberate attempts to employ the ancient past to the unconscious repetition of ancient stereotypes. In a panel discussion we will present a synopsis of our research on a variety of topics. From the parallels early Americans saw between the rise and fall of the Ancient Greeks and Romans with that of the French Revolution and the war of words between Lord Elgin and Lord Byron over the Parthenon Marbles to the influence of Troy on Shakespeare's work and the British Empire and the ancient prototypes of modern arguments about slavery, the influence of ancient history on modern ideology is widespread and pervasive.

The Effects of the Potato Famine in the 19th Century and Today

Presenter(s): Alexa M Arlinghaus, Mary K Nolan, Katherine A Strittmatter
Advisor(s): Marybeth Carlson
History 2:00 PM-3:00 PM
Course Project, 12_SP_HST_486_P1 Marianist Hall Learning Space - 218

Ireland's infamous Potato Famine of the mid-19th century tragically affected millions. Historians debate whether the British government's half-hearted response was poor management of resources or a strategic way to lessen the Catholic population of Ireland. Ireland's population declined substantially in the decades following the famine; the population during the 20th century was roughly half of what it was before the famine. This is not merely due to famine hardship; because the standard of living rose a during the 1860s and 1870s. The population declined due to emigration and the deferment of marriage and childbirth. In the United States today, many states are implementing the Irish Potato Famine into textbooks along side other forms of genocide; the Irish potato famine is considered genocide in the curricula of many states. Between the United States, Britain, and Ireland, the United States is the only country that teaches the Irish Potato famine as a form of genocide. British and Irish schools have both adopted the revisionist perspective on famine.

Where Women and Disability Studies Meet: Research and Practice

Presenter(s): Keelie M Gustin, Kelly A MacKenzie, Julianne C Morgan, Elizabeth A Myers, Alec M Smidt
Advisor(s): Caroline W Merithew
History & Women and Gender Studies — 3:00 PM-4:00 PM
Senior/Capstone Project — Kennedy Union - East Ballroom

For this Panel Presentation, students from the capstone course in Women and Gender Studies (WGS490) will present their semester research projects which explore the connection between women's and disability studies.

Nationalist Political Violence in Ireland: The Land League, the Easter Rising, and the Public Safety Act of 1923.

Presenter(s): Randy L Cobb, Caroline M Ibbotson, Mark A Lazcano
Advisor(s): Marybeth Carlson
History — 3:00 PM-4:00 PM
Course Project, 12_SP_HST_486_P1 — Marianist Hall Learning Space - 218

A selection of events pertaining to political violence in Irish history will be examined and related to one another in the scheme of Irish nationalism. In the early 1880s, a mass movement occurred in Ireland. Using ostracism and boycotting, the Land League pushed for greater control of land by the occupiers (peasant farmers). Such tactics often led to violent acts. Following the arrests the movementâs leaders, the Ladiesâ Land League emerged and proved even more radical. Finally settled by the Kilmainham Agreement, land control was no longer a political issue. The issue of Irish politics became home rule. Easter 1916: Ireland witnessed an insurrection challenging the rule of the British. Irish Republican seized key locations around Dublin and proclaimed a free and independent Irish Republic. Lasting a mere seven days; the revolution was defeated. Out of the ashes of this defeat, nationalism would spread among the people of Ireland. The rise in nationalistic beliefs led to a growing hunger for independence. The Irish War for Independence ended in compromise for Republican Nationalists with the Anglo-Irish Treaty, which heavily strained the progression of Irish Nationalism. The Treaty allowed Ireland to have its own parliament, but required legislators to swear an oath to a British executive leader. The newly formed Free State government faced violent opposition from Republicans who demanded complete independence from Great Britain. In order to stabilize the country and end the resulting Civil War, the Free State government enacted the Public Safety Act in 1923. The passage and enforcement of the Public Safety Act effectively stamped out any remaining Republican Nationalism, and allowed Great Britain to further sustain control over Ireland. The Land League, the Easter Rising, and the Public Safety Act all represent and relate to nationalist sentiment leading to the use and suppression of violence.

Navigating the Middle East: Student Field Research in Jordan, Egypt and Morocco

Presenter(s): Lindsey E Cummings, John E McGinnis, Rebecca Young
Advisor(s): Ellen L Fleischmann
History — 3:00 PM-4:30 PM
Honors Thesis — LTC - Forum

The Middle East, a region of geostrategic interest to the United States and international community, is also a place where human lives have been shaped by tumultuous political events and social change. The legacy of colonialism, wars, uprisings, resurgent religion and nationalism make their mark in tangible ways on people's lives every day. Students at the University of Dayton have become increasingly interested in engaging with the people, history, culture, languages and politics of the Middle East through traveling to, studying, and learning about the region. This panel features the work of three students who have engaged in fieldwork in Jordan, Egypt and Morocco for their honors thesis research. The focus is on how each has confronted the particular methodological challenges of doing academic research in a region where local people are daily dealing with refugee crises, uprisings, contested elections, and rapid paced change. They will discuss questions such as: how does one interview people living in fear and insecurity? How does one collect research data on sensitive subjects? What are the perils, pitfalls and rewards of doing research in an unstable region undergoing intense change? All three students are pioneering new directions for University of Dayton undergraduate research that show promise and challenges. Lindsey Cummings will discuss her oral history interviews with Iraqi refugees in Jordan. John McGinnis will

talk about his interactions with activists who have used social media in the Egyptian uprising, and Rebecca Young will present on her work in the French archives researching French colonial educational policies toward women in Morocco.

POLITICAL SCIENCE

Understanding Darfur

Presenter(s): Grace F Blumberg, Hillary A Cook, Theodore J Masthay, Daniel S Rajaiah, Concetta M Reda, Allison M Varricchio
Advisor(s): Alexandra Budabin
Political Science — 11:00 AM-12:00 PM
Course Project, 12_SP_POL_300_07 — LTC - Forum

In 2004, conflict engulfed the region of Darfur in western Sudan and drew worldwide attention. The Government of Sudan was using excessive force to suppress a rebellion. The international community debated over the nature of the conflict with some observers describing the situation as genocide. In the US, an unprecedented social movement arose to address the conflict by mobilizing public action. Eight years later, how can we explain the Darfur conflict and the impact of the international community's response? This panel explores various angles of the Darfur conflict.

Minority Rights and the Movement of Peoples

Presenter(s): Margaret L Gurney, Emily E Kaylor, Andy J Kurzhals, Alia E Sisson
Advisor(s): David J Watkins
Political Science — 1:00 PM-2:00 PM
Course Project, 12_SP_POL_300_H1 — St. Joseph's Hall - 23

Migration--the movement of peoples across state borders to live and work on a temporary or permanent basis--is a challenging feature of life in contemporary political societies. These panel participants will share their research findings into the moral and ethical dimensions of how states cope with migration, and the challenges multicultural societies migration often produces. The research topics will include recent crackdowns on undocumented immigrants in some US states, a new education policy in Arizona that restricts multicultural education, efforts to craft a "guest worker" policy arrangement that serves to treat foreign workers fairly while acknowledging their temporary status, and finally a look at the politics and policy of Israeli settlements built in Palestinian territory in recent years.

Examining religious exemptions to general laws

Presenter(s): Christopher B Brough, Mariah L Douglas, Allison N Meena, Nick Saethre
Advisor(s): David J Watkins
Political Science — 2:00 PM-3:00 PM
Course Project, 12_SP_POL_300_H1 — St. Joseph's Hall - 23

A hallmark of liberal democratic societies is the rule of law: the law, we tell ourselves, is meant to apply to all, equally and fairly. Another hallmark of liberal societies is the protection of the freedom of religion. All three presenters in this panel discussion are examining particular cases in which these two imperatives of liberal society clash. When a religious exemption to a general law is requested in a liberal society, how should such a conflict be adjudicated? Drawing on the work of prominent political philosophers, these presentations will consider how this question could be best answered in concrete cases. Cases discussed will include Catholic-affiliated institutions requesting an exemption from insurance regulations requiring contraception coverage and request by Amish groups for an exemption from mandatory schooling laws.

The Many Different Faces of Modern Day Slavery

Presenter(s): Aidan H Curran, Colin D Davidson, Luc-Rikardo R Fils, Anna L Godby, Nicholas J Hufford, Joseph M Morand, Sarah L Pagenstecher, Jacklyn V Smith, Samuel D Wagner
Advisor(s): Anthony N Talbott
Political Science 2:00 PM-3:20 PM
Course Project, 12_SP_POL_300_04 Kennedy Union - 310

An estimated 27 million people are enslaved in the world today. Human trafficking, or the modern day slave trade, is the second largest criminal enterprise in the world and is the greatest human rights challenge of our time. A series of panels will present on various aspects of the issue: from an overview of human trafficking, to discussion of the many types of human trafficking, to an overview and evaluation of responses to the crime. Panelists will present information in a variety of formats, to include: discussion, presentation, audience interaction, and student shot video.

Delivering Justice in Multicultural and Multiethnic societies

Presenter(s): Madeline Bell, Maurice B Bell, Kathryn M Bruce, Solani T Harawa, Madison M Kramer
Advisor(s): David J Watkins
Political Science 3:00 PM-4:00 PM
Course Project, 12_SP_POL_300_H1 St. Joseph's Hall - 23

Living together under a single government and a single set of laws is a significant challenge, particularly in those societies marked by significant cultural, ethnic, racial, linguistic, and/or religious diversity. Each presenter in this panel discussion will present and discuss research on a particular challenge or controversy faced in a diverse society, ranging from religious conflict in Northern Ireland to the racial dimensions of felon disenfranchisement in the United States to the renaming of cities with explicitly "Hindu" names in India. Our goals will be to look for common themes in these seemingly divergent cases, and to consider what kind of normative theories, principles or rules might best help us navigate and understand these difficult situations.

Politics of Genocide: Current Research

Presenter(s): Molly C Daniels, Kathryn M Hoendorf, Kristina L Lucas
Advisor(s): Alexandra Budabin
Political Science 4:00 PM-5:00 PM
Course Project, 12_SP_POL_300_08 LTC - Studio

This panel will present current research on various projects related to the politics of genocide.

SUSTAINABILITY, ENERGY AND ENVIRONMENT INITIATIVE(SEE)

Drinking for Change: Dayton Aquifer, Bottled Water, Student Choices and Your Ideas

Presenter(s): Hailey Kwon, Benjamin M Schultheis, Abigail M Spohn
Advisor(s): Leanne M Jablonski FMI
Sustainability, Energy and Environment (SEE) 2:00 PM-3:00 PM
Course Project, 12_SP_UDI_262_M1 Kennedy Union - East Ballroom

Dayton sits atop one of the largest US aquifers with excellent drinking water quality; yet many UD students purchase bottled water. Disposable plastic bottles are harmful to the environment because they do not decompose, 70% are not recycled, and fossil fuels are expended in their manufacture and transportation. As part of the first-year Sustainability, Energy and the Environment (SEE) mini-course, we conducted a drinking water educational campaign while investigating reasons for bottled water purchase. Through interviews of River Stewards and Sustainability Club we learned about effective educational methods for changing behavior. We interviewed UD Dining Services to learn about their sustainability initiatives. Although UD has implemented sustainable practices such as reusable bottles, water refill stations and reduced prices for non-disposables, bottled water remains a large profit source as students bought 139,128 bottles in 2011. We observed student beverage choices on campus and discovered that many students chose tap water during cafeteria dining, but carried disposable bottles more frequently than using reusable bottles or drinking fountains. Students were surveyed for their buying frequency and preferences and their perceptions and knowledge about bottled

water and tap water including: costs, quality and the sustainability implications of waste stream, carbon footprint and water source. Near World Water Day, we administered a blind taste-test comparing tap and bottled water. Based on findings from other colleges, we hypothesized that students would not be able to distinguish between the two water types. We predicted that convenience and lack of knowledge about water quality influenced their choices. In this session, we will present our findings, then open the discussion to attendees. Together, we will explore ways to educate about drinking tap water on campus and to encourage changes in plastic bottle use. Ideas will be incorporated into SEE LLC plans, orientation of new students and SEE Initiative outreach.

SOCIOLOGY, ANTHROPOLOGY AND SOCIAL WORK

Lessons Learned: Applying the White Privilege Conference to the University of Dayton

Presenter(s): Frederick L Cox, Erin L Gahimer, Leah M Grandy, Bernard D Jones
Advisor(s): Leslie H Picca, Ruth Thompson-Miller
Sociology, Anthropology and Social Work — 11:00 AM-12:00 PM
Independent Research — St. Joseph's Hall - 13

Four undergraduate students will discuss their experiences with two sociology professors at the White Privilege Conference in Albuquerque, New Mexico. The students will spend a few minutes each talking about what they learned. The majority of the time will be spent in conversation with the audience about strategies to improve the campus climate at the University of Dayton. As we all play a role in the university community, we welcome conversation with everyone (from those new to conversations about social justice to the seasoned veterans!).

PANEL DISCUSSIONS

SCHOOL OF BUSINESS ADMINISTRATION

MANAGEMENT AND MARKETING

UD Business Plan Competition: Insights from the Finalists

Presenter(s): Matthew F Antenucci, Christopher M Carcione, Michael R Groff, Alexander T Reineke, James R Russell
Advisor(s): Diane M Sullivan
Management and Marketing — 11:00 AM-12:00 PM
Independent Research — Miriam Hall - 109

In this panel discussion, members of the five finalist teams from the 2011-2012 UD Business Plan Competition (UDBPC) will discuss their experiences in the competition. The five finalist teams include Aggiez, SafeStart, Safety Lighting System, SoMoLend and UD Wind Turbines. Through the panel discussion, the finalist teams will comment on what they learned through participating the competition as well as their impressions of the competition. Finalists will also comment on and describe the support provided to them throughout the competition. Additional time will be provided for audience members to ask questions to the finalists about their experiences.

UD-SBA Flyer Angels: Student insights from a year of making high-tech private equity investments

Presenter(s): Allison J Coppin, Gerald P Kierce, Tricia Lammers, Colin T McGrath, Elizabeth M North, Jonathan C Schneider
Advisor(s): Jay J Janney, Dean B McFarlin
Management and Marketing — 1:00 PM-2:00 PM
Independent Research — Miriam Hall - 109

Recently a UD Alum named Ron McDaniel gave a 7 figure gift to the University of Daytonâs Entrepreneurship program to launch a student run private equity portfolio, now in its second year. UD's Entrepreneurship faculty manage the program, annually selecting a handful of students each year to participate on the Flyer Angels Fund team.The purpose of this panel discussion is to allow those students time to share their experiences with Flyer Angels over the past year; what they enjoy, as well as the surprises and challenges managing the fund creates. In addition theyâll discuss the upcoming year, how to apply, and what is expected of students. Questions from the audience are welcome. The students will talk about investments they have considered, as well as their experiences in doing due diligence analyses, as well as networking with business angels as a part of the Ohio Tech Angels (OTAF) Business Angel network. The Flyer Angels students will discuss the workload involved, the relationship the Mgt 321, plus answer any questions from the audience. Due to the confidential nature of the investment decisions, the student cannot identify companies they have either analyzed or invested in, other than at a very general, non-identifying level.

The SOE-SBA Entrepreneurship Collaboration: High-tech innovation projects and insights from B-School students on their experiences

Presenter(s): Matthew F Antenucci, Christopher M Carcione, Miles J Decrane, Danielle L Detrude, Michael R Groff, J Ross Hallman, Elizabeth B Hayes, Winston E Imwalle, Charles S Kastner, William J Walker
Advisor(s): Jay J Janney
Management and Marketing — 2:20 PM-3:20 PM
Course Project, 12_SP_MGT_422_N1 — Miriam Hall - 109

Now in its fifth year, the SOE-SBA collaboration is a signature part of the Entrepreneurship program's national rankings. The program is pretty simple: every fall the School of Engineering recruits sponsors for its innovation center projects. Engineering teams of 3-5 students bid on projects, and are then assigned to the projects. We then recruit teams of 2-3 Entrepreneurship students to work on the projects. The entrepreneurship students work on market feasibility during the fall, and meet regularly with the engineering students as they develop a technical feasibility for the fall semester.The teams enter the project into the UD Business Plan Competition; over five years 8 teams have been named finalists and those

students have won significant cash prizes. At the end of the semester the students present their findings to the sponsor, and the project either concludes for the engineers, or it gets renewed for the spring. Meanwhile, the business students enroll in Mgt 422 (writing business plans), and they prepare a full business plan for the sponsor, building the work they did in the fall.During this panel discussion 10 business students will discuss their experiences, and answer questions you may have. They were assigned to four projects: developing new uses for a rocket ignition lighter, creating an RFID based forensic evidence database and data input, and creating a lower cost residential wind powered turbine. This last team is a finalist in the UDBPC, and is guaranteed to win at least $5k. The program is targeted at entrepreneurship majors, although this year we had an entrepreneurship minor on one of the teams. Itâs a great way to hear from the students about what they like, what surprises and challenges they face, and how to work on a multi-disciplinary team.

OTHER FORMATS

COLLEGE OF ARTS AND SCIENCES

MATHEMATICS

Integration Bee Lunch

Mathematics — 12:00 PM-1:00 PM
Luncheon — Science Center - Atrium

The Department of Mathematics will host a pizza lunch in the Science Center Atrium prior to the Integration Bee.

10th Annual Integration Bee

Mathematics — 1:00 PM-3:00 PM
Interactive Competition — Science Center - 255 (Chudd)

The students compete in teams of 2-3 people. This is organized in a similar way to the traditional spelling bee. Teams will be evaluating integrals that are projected on a screen. If a team incorrectly evaluates an integral, the team is eliminated from the competition. After the elimination rounds, we will hold the lightning rounds. The first 'y' many teams to correctly evaluate the given integrals will proceed to the next round. We do this until there is a 1st, 2nd and 3rd place team. First, second, and third place teams will receive math t-shirts.

SCHOOL OF EDUCATION AND ALLIED PROFESSIONS

Counselor Education and Human Services

A Qualitative Study of Returning Resident Assistants Reflecting on Their First Year

Presenter(s): Robert L Hengesbach
Advisor(s): Molly A Schaller
Counselor Education and Human Services — 4:30 PM-6:30 PM
Graduate Research — LTC - Team Space

The purpose of the study was to explore the way in which Resident Assistants make meaning of their first year in the position. Second and Third Year Resident Assistants from different living areas at the University of Dayton were interviewed about their first year as a Resident Assistant. The use of returning Resident Assistants was based on the Subject-Object Shift Theory by Kegan (1994). Each Resident Assistant was asked to reflect on how s/he developed as a person and as a Resident Assistant over their first year. The Resident Assistant position proved to be a developmental experience in the interpersonal, intrapersonal and cognitive dimensions of the students experiencing it. The tools of interview summary and thematic analysis were used to explain the common experience of the participants.

After-school Programs and Parental/Guardian Impact on Literacy

Presenter(s): Rebecca A Olinsky
Advisor(s): Molly A Schaller
Counselor Education and Human Services — 4:30 PM-6:30 PM
Graduate Research — LTC - Team Space

The purpose of this research was to gain an understanding of parent/guardian views on literacy and to gain information on how high quality after-school programs can impact literacy development. After-school programs and facilities can have a positive impact on children who attend on a daily basis. This research project utilized focus groups at a high quality after-school facility, Adventure Central in Dayton, to learn more about the needs and desires that the parents would want. The focus groups consisted of parents who have children attending the community based program two times per week. The after-school facility is a partnership with Ohio State University Extension, 4-H, and Five Rivers MetroParks. The focus is positive youth development and utilizing nature and science to enhance young childrenâs lives.

First-Generation Students and Retention at the University of Dayton

Presenter(s): Michela A Buccini
Advisor(s): Molly A Schaller
Counselor Education and Human Services 4:30 PM-6:30 PM
Graduate Research LTC - Team Space

Choy (2001) found that first-generation students were twice as likely to leave a four-year institution in comparison to students who are non first-generation students. This study was done in a phenomenological research framework to hear the stories of first-generation students at the University of Dayton in order to understand the barriers these students would face in this context. The one-to-one interviews that were conducted gave a group of first-generation students an outlet to voice their concerns and successes to assess the support systems for first-generation students at the University of Dayton. Findings suggest that students are interested in support, however fear being othered.

Illuminating Transformative Learning, Context, and Meaning Making in Adults: A Student Perspective

Presenter(s): Catherine Anderson
Advisor(s): Molly A Schaller
Counselor Education and Human Services 4:30 PM-6:30 PM
Graduate Research LTC - Team Space

Transformative learning has played a pivotal role in adult education since Jack Mezirow analyzed perspective transformation over 30 years ago. However, despite numerous empirical studies addressing theoretical and practical dimensions, little data exists regarding the individual experience of perspective transformation and its contextual influences. Using an autoethnographic methodology that is as contemplative as the subject matter itself, this unique qualitative study examines transformative learning and select conceptual underpinnings--including critical reflection, spirituality, authenticity, and self-transformation--as they relate to adult learning both in and outside of the classroom. Data collection techniques include: a study of artifacts; self- and participant interviews incorporating the Action-Reason-Thematic Technique (or ARTT); personal narrative comprising journal writing, critical incidents, and metaphor analysis; as well as conceptual mapping. Through careful self-examination and systematic reflection, the researcher explores abstract ways of "coming to know," considering intrapersonal, interpersonal, and cognitive dimensions. Due to its sensitive, intertwined, and evolving nature, such epistemic practice may prove difficult to investigate otherwise, using alternate, large-scale means. The study offers a conduit between what is personal and what is cultural, providing an intimate, experiential account of meaning making, while relating it to context. As the nature of modern life becomes increasingly pluralistic, interdependent, and complex--forcing individuals to grapple with notions of "self," "universe," and "other"--the implications for self-discovery and society are immense. The researcher addresses possibilities for personal and social change, as well as multiculturalism, highlighting an intricate process of challenging individual and cultural assumptions as she navigates uncertainty. Presentation material includes select concept maps, as well as creative work and personal photography.

Maximizing Faculty Motivation in International Programming

Presenter(s): Heather A Schieman
Advisor(s): Molly A Schaller
Counselor Education and Human Services 4:30 PM-6:30 PM
Graduate Research LTC - Team Space

Internationalization of college and university campuses is a growing trend around the country. In recent years the number of incoming international students has continually risen, creating an even more significant imbalance with the number of domestic students studying abroad. University faculty, who serve as a key factor in recruiting student participants, are often hesitant to get involved in international programs and curriculum integration. With that in mind, the intent of this research is to discover the motivational factors that bring faculty to international programming. The University of Dayton, and its long running faculty-led programs, has established a number of committed faculty members to the task of expanding the UD classroom to an international arena. Through analysis of individual interviews with faculty participants, across departments and disciplines, key themes were found for their involvement in international programming, as well as possible areas of improvement and continued support. By pinpointing the motivational factors that drive their involvement, as well as areas of concern, the intent of this research

is to be able to create a framework for faculty development. In turn, recommending an environment that will increase participation by both the faculty and student populations in international programming.

Student Involvement and Alcohol Consumption

Presenter(s): Christopher M Johnson
Advisor(s): Molly A Schaller
Counselor Education and Human Services 4:30 PM-6:30 PM
Graduate Research LTC - Team Space

High-risk alcohol use is a concern on college campuses. It has been suggested that participation in student activities can impact high-risk drinking (Harvard, 2001). This study examines possible correlations between alcohol consumption and a studentâs involvement in campus activities and student organizations at the University of Dayton. Previous studies at other universities have been inconclusive, as campus and organizational culture can differ greatly from institution to institution. This correlational research study measures student involvement and alcohol use, using data collected on a survey combining the Educational Benchmarking, Inc. (EBI) and Association of College Unions International (ACUI) Student Activities Assessment and the World Health Organization Alcohol Use and Disorders Identification Test (AUDIT). The study investigates multiple variables for measuring student involvement, including number of organizations/events involved in and time spent in an organization, as well as two factors related to alcohol, alcohol consumption and alcohol-related consequences. Results of the study will indicate the relationship of student involvement and alcohol consumption at UD, and open the door to further research on specific populations.

Students Perception of Alcohol Induced Blackouts at the University of Dayton

Presenter(s): BaShaun H Smith
Advisor(s): Molly A Schaller
Counselor Education and Human Services 4:30 PM-6:30 PM
Graduate Research LTC - Team Space

With the research of the Alcohol Task Force at the University of Dayton, professionals realize that there is an epidemic of high alcohol consumption by some students on Dayton's campus. The purpose of this study was to better understand students' perceptions of their drinking patterns with a specific focus on alcohol induced blackouts. This study focused on college students at the University of Dayton, a mid-size Catholic institution in the Midwest. The students who were surveyed ranged from first year students to seniors. Two populations of students were surveyed. These included a purposeful sample of students who had an alcohol related sanction in Community Wellness and a convenience sample of students enrolled in English classes at Dayton. The survey asked a series of questions regarding their use of alcohol, family history, frequency, and awareness of their own experiences of blackouts and those of others. The survey allowed students to reflect on their past experience as it pertains to alcohol induced blackouts.

Support, Commitment, and Persistence: Are Students in Supportive Academic Programs More Committed to Their Institutions?

Presenter(s): Twila G Murray
Advisor(s): Molly A Schaller
Counselor Education and Human Services 4:30 PM-6:30 PM
Graduate Research LTC - Team Space

Institutional commitment has been shown to be highly predictive of college student retention (Bean, 1980; Woosley & Miller, 2009). Research indicates that highly supportive academic programs with a career-related focus are associated with higher retention rates (Nitecki, 2011). Furthermore, academic and social integration have been related to retention through the mediating influences of institutional commitment (Beal, Reison, Zea, & Caplan, 1999). This study used a survey method to investigate whether students who are enrolled in a supportive academic program -- one promoting academic and social integration -- demonstrate higher levels of institutional commitment than students who are enrolled in a less supportive general education program. The study was conducted at Clark State Community College and contains data from undergraduate students in the Agriculture/Horticulture Technologies programs and the Associate of Arts program. Additional analysis was performed to deter-

mine the extent to which other demographic factors contribute to mean institutional commitment scores among various sub-populations across a wide variety of academic programs.

The pro-social attitudes of sophomore men at the University of Dayton

Presenter(s): Maggie B Gillespie
Advisor(s): Molly A Schaller
Counselor Education and Human Services — 4:30 PM-6:30 PM
Graduate Research — LTC - Team Space

Research on male behavior has historically focused on negative aspects, such as consumption of excessive alcohol, engaging in demeaning actions against women and participating in violent behavior (Harper & Harris, 2010). The attitudes and perceptions of being a man are influenced by numerous factors, including family, friends, religion, and environment (Harris & Harper, 2008). This research was designed to identify and target the positive attitudes of sophomore men at the University of Dayton; to attempt to identify where the attitudes came from and the barriers men face to remain true to their value bases. While research on the existence and development of pro-social behaviors (i.e., behaviors intended to benefit others) has been an active field of study for the last several decades, student affairs practitioners at the higher education level have traditionally tried to correct anti-social behavior by focusing on the negative â frequency of sexual assaults by men, unhealthy drinking habits, and other counterproductive behaviors (Eisenberg & Fabes, 1998; Berkowitz, 2010). Research also shows, however, that most men report having pro-social attitudes but are inhibited from expressing them because of the incorrect perception that other men have do not have pro-social attitudes. This misperception also serves as a justification to other men to allow anti-social behavior (Berkowitz, 2010). In an attempt to be pro-active about destructive behavior, this research gave men the opportunity to reveal the truth about their authentic attitudes towards each other and about how men act today. This approach created an environment free from misperceptions and reduced a false and destructive sense of gender dichotomies. The results of this research provided insights for college administrators to use as they design and implement male-centric programming and initiatives designed to help college men remain true to themselves.

Transition Program for Chinese Student at the University of Dayton:A Developmental Perspective and Insight of Intervention for Chinese Student Transition to American Higher Education

Presenter(s): Xue Tao
Advisor(s): Molly A Schaller
Counselor Education and Human Services — 4:30 PM-6:30 PM
Graduate Research — LTC - Team Space

In spite of the continuing growth in enrollment of Chinese students coming and studying in American higher education institutions, there is a paucity of research about the experiences, transitions and development of Chinese students while attending higher education institutions in the United States. Chinese students have a unique culture background and identity. Their world outlook, views on life and values are different from American students. On the other hand, the new Chinese students also have some other unique characteristics, which come from their age. As a new generation, Chinese students decide to be absorbed into Western culture, while interacting with their own identity and displaying some special personalities, which are different than Chinese students of previous generations. There are bridge programs at University of Dayton designed to support international student transition. The goal of this research is to understand those inherent characteristics combined with newly created identities, exam the existing bridge programs, and find the best ways to help Chinese students transition to American higher education system by hearing their internal voice and story.

9:00 AM to 5:00 PM

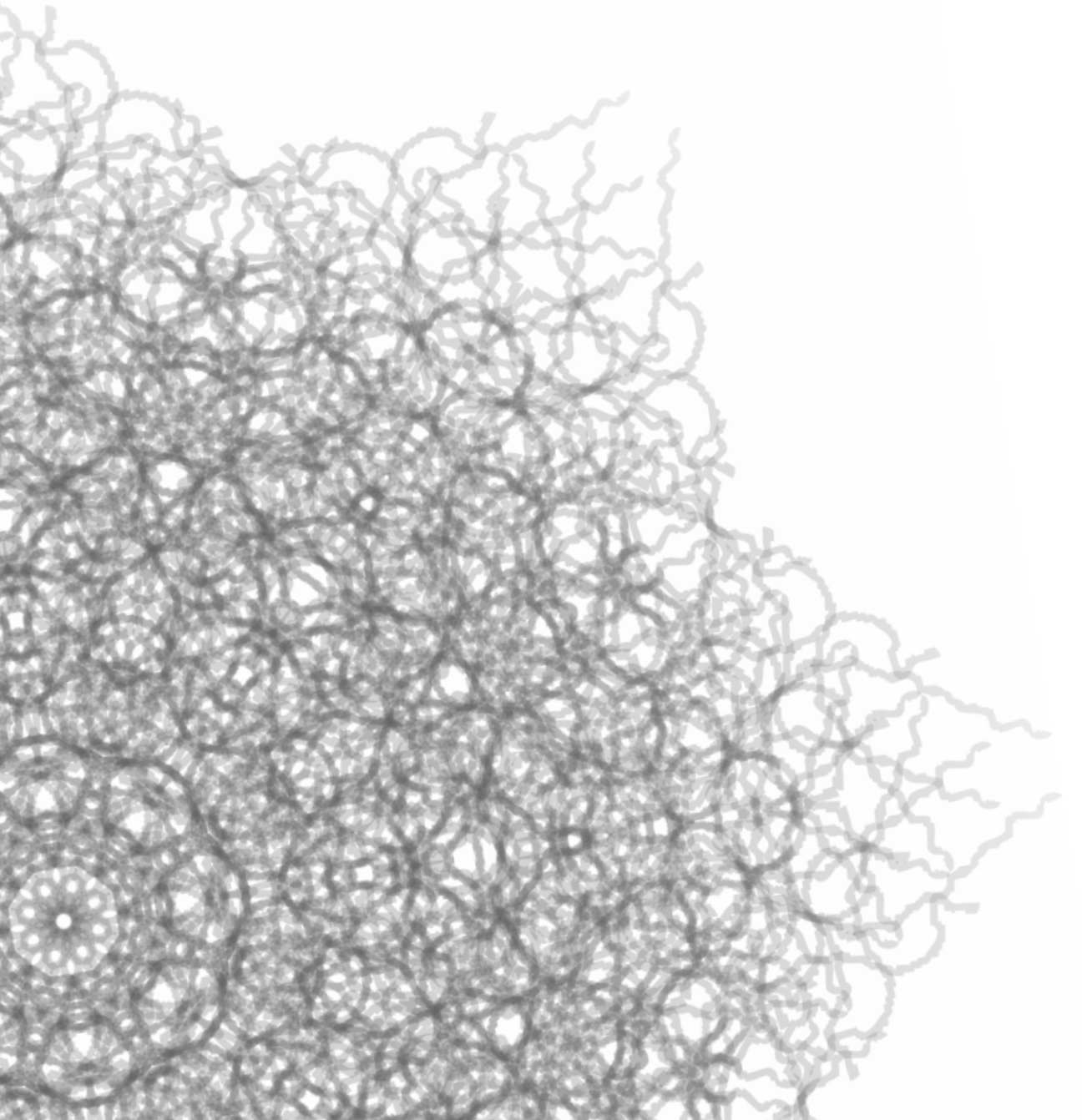
Why We Attend School: A Qualitative Retention Study at a Proprietary Higher Education Institution

Presenter(s): Jennifer K Plumlee
Advisor(s): Molly A Schaller
Counselor Educ & Human Servs 4:30 PM-6:30 PM
Graduate Research LTC - Team Space

Retention has become an important issue for colleges and universities throughout the United States. While current retention research has focused on traditional four-year universities and community colleges, little attention has been dedicated to retention efforts at for-profit colleges. Utilizing the personal experiences of for-profit students, the purpose of this research was to explore how a student's previous academic history, relationships with faculty and peers, personal responsibilities, and individual attitude affect a student's ability to be retained. Data was gathered from the for-profit institution: Lincoln College of Technology in Franklin, Ohio. Lincoln College of Technology grants associate's degrees in the medical, business, criminal justice and informational technology fields. Data consisted of personal interviews as well as the analysis of the college's retention documents. The methodology for the research was guided by the constructivist paradigm and grounded theory and the data generated assists a for-profit college's ability to explain, predict, and explore retention.

Performances

WEDNESDAY, APRIL 18, 2012
9AM TO 5PM



Contemporary,Popular and World Music for the saxophone Quartet

Presenter(s): Alison E Brady, Melissa A Cobb, null null, Lyndsay J Hoying, Robyn L Kammer, Fernando Martinez, Fiona B McGowan, Matthew S Morris, Chris A Satariano, Matthew S Schroeder, Jonathan R Tobias, Joy M Willenbrink
Advisor(s): Willie L Morris
Music 10:30 AM-12:00 PM
Course Project, 12_SP_MUS_390_09 Sears Recital Hall

The First Flight, University, and Flyer Saxophone Quartets will be performing a wide variety of musical styles including, pop, contemporary, and world music. The compositions were written and arranged some of the most notable composers in the world.

Honors Recital Audition

Presenter(s): Samuel C Day, Stephanie M Jabre, Robyn L Kammer, Mitchell A McCrady, Fiona B McGowan, Brennan A Paulin, Jonathan D Payne, Samuel J Petrick, Matthew S Schroeder, Kevin J Sylvester, Anthony M Trifiletti, Rebecca E Welch, Joy M Willenbrink
Advisor(s): Phillip C Magnuson
Music 1:00 PM-3:00 PM
Honors Performance Sears Recital Hall

The Honors Recital Audition is an annual event presented by the Department of Music. From September to March, the music faculty evaluate all student performances from our weekly Friday recital. The 12 students with the highest rankings are eligible to compete in this audition for one of the six spots on our Honors Recital, which will be held Friday, 27 April.

Student Songwriting Concert: Guitar Students of Jim McCutcheon

Presenter(s): Emily D Gatlin, Robert J Hoerr, Brendan D Michaelis, and others
Advisor(s): James R McCutcheon
Music 3:00 PM-4:00 PM
Course Project, 12_SP_MUS_399_40 Kennedy Union Boll Theatre

Featuring songs and pieces written by UD guitar students of Jim McCutcheon, this concert is made up entirely of original works performed by the composers and their friends.

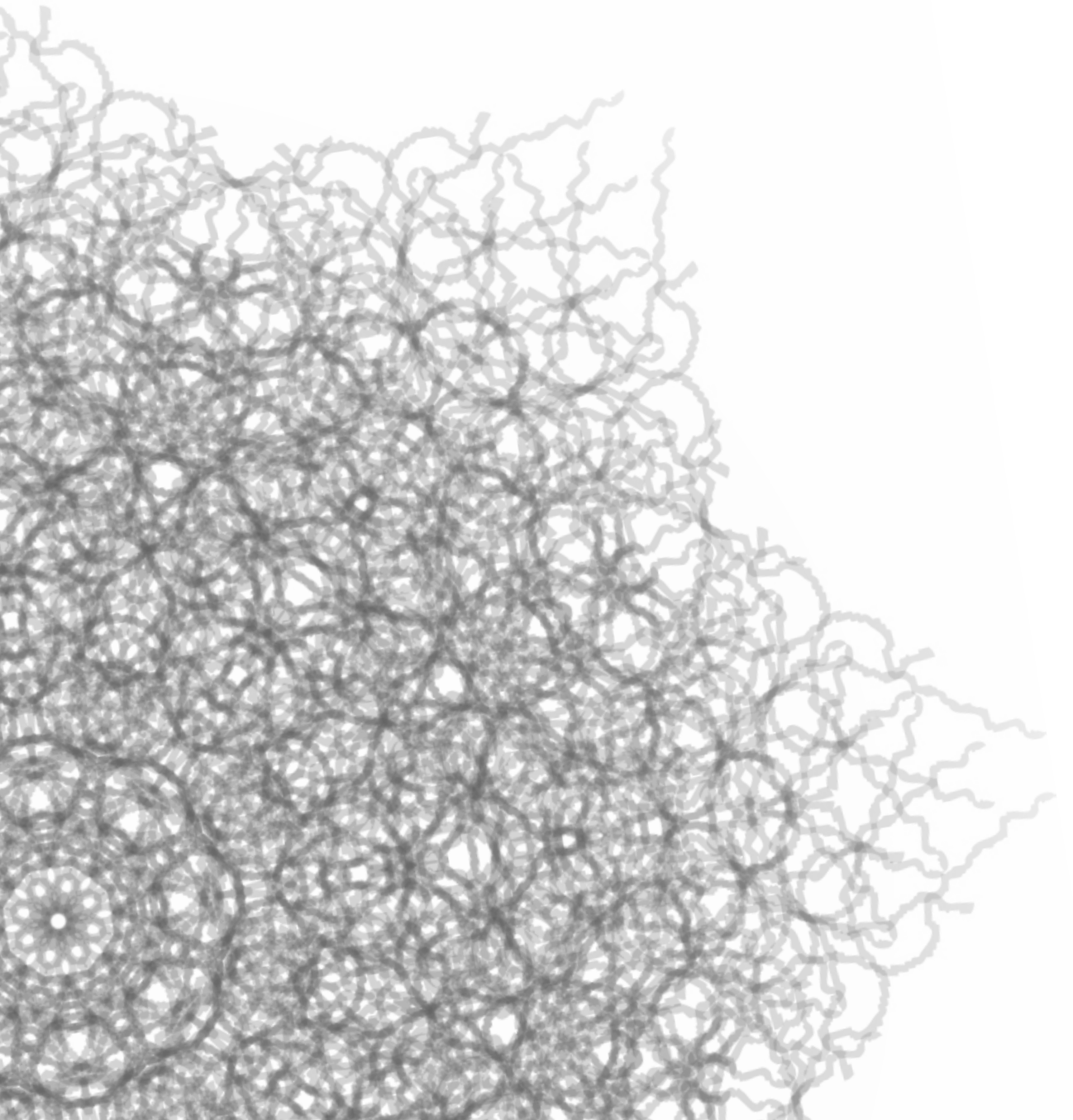
The Hindemith Sonata for Four Horns: A Lecture Recital

Presenter(s): Sara A Jordan, Stephanie M Kramer, Mitchell A McCrady, Jonathan D Payne
Advisor(s): Richard K Chenoweth
Music 3:30 PM-4:30 PM
Course Project, 12_SP_MUS_399_13 Sears Recital Hall

This is an application to present a lecture recital during the Stander Symposium entitled,The Hindemith Sonata for Four Horns: A Lecture RecitalThis is a multi-faceted lecture-performance demonstration prepared by members of the UD Horn Quartet (three of which are members of the UD Honors program). All four students are studying in the UD Horn Studio and have distinguished records in scholarship and performance. The project will be under the guidance and supervision of Dr. Richard Chenoweth, Professor of Horn.The presentation will include a detailed verbal analysis of the Hindemith Sonata for Four Horns, as well as presentation of detailed information about Paul Hindemith, his other works for solo horn and his use of the horn in chamber music. It will also include excerpts of the Sonata that draws attention to the orchestration and compositional innovations of this work. There will be a brief discussion of the chamber music ensemble of four horns and other relevant repertoire for this ensemble. The presenters will also discuss the impact that this work has had on contemporary wind chamber music and conclude the presentation with a complete performance of the work in its entirety. The presentation will make use of Power Point, other audio visual aids and internet resources and will be geared towards a general audience.

Visual Arts Displays

WEDNESDAY, APRIL 18, 2012
9AM TO 5PM



Vocation: Creating a Masterpiece

Presenter(s): Joseph E DeBrosse, Lauren E Erhart, Nick M Fahrig, Lauren K Glass, Emily A Hascher, Amanda N Jones, Kara M Kindel, Lydia R Kindelin, Jann L Knappage, Sarah E Kociuba, Ryan D Mooney, Emily M Motz
Advisor(s): David W Darrow, Angela A Zukowski
Institute for Pastoral Initiatves — 1:00 PM-2:00 PM
Course Project, 12_SP_ASI_357_P1 — Alumni Hall - 101

Blessed John Paul II in his Apostolic Letter to Artists wrote: "All men and women are entrusted with the task of crafting their own life: in a certain sense, they are to make of it a work of art, a masterpiece." The Chaminade Scholars are exhibiting their personal interpretation of Blessed John Paul II's message through various artistic expressions.

We Remember... the Holocaust and Other Genocides

Presenter(s): Kathryn A Akin, Mary C Alwan, Jordan L Blake, Amy N Bush, Caroline L Clarke, Thomas G Corcoran, Daniel L Dashewich, Kathryn R Fien, Jemima A Homawoo, Kathleen E Jipson, Erica M Long, Erika C Morris, Brian E Przybylowski, Andrew D Schaffer, Lauren A Simcic, Abigail A Smith, Jacqueline L Stubbers, Jordan K Stuckey, Courtney E Wimsatt, Kaitlyn G Zwayer
Advisor(s): Alexandra Budabin
Political Science — 1:30 PM-3:30 PM
Course Project, 12_SP_POL_300_08 — Kennedy Union - Torch Lounge

Thursday, April 19th is Holocaust Remembrance Day. In memory of the Holocaust, the Politics of Genocide and Darfur: An Interdisciplinary Approach classes have created a remembrance gallery with posters on the Holocaust, Darfur, Congo and other genocides. During the daylong gallery there will be time slots for discussions on the Holocaust and Darfur as well as on what genocide means today.

VISION this: THE QUILT AS ART // Heal Thyself: Artistic Exploration, Insight, & Development within Therapeutic Practices

Presenter(s): Viveca McDonald-Findley, Patricia S Rowan
Advisor(s): Judith L Huacuja
Visual Arts — 2:00 PM-3:00 PM
Senior/Capstone Project — Marianist Hall Learning Space - Commons

Vision this: Quilts as Art. Quilts and Fiber Arts have been viewed as domestic arts throughout much of Western history. Some call these "crafts" and do not include Art Quilting as an art form. I shall illustrate and validate, through documentation and persuasive examples, the notion of Fiber Arts and Quilts as having artistic merit. These art forms have literally become woven into our everyday lives and, more recently, installed in museums as important contributions to Western art history. Heal Thyself: Artistic Exploration, Insight and Development within Therapeutic Practices Art therapy is an expressive non-verbal way to tackle mental, physical, and emotional struggles in a person's life. Utilizing art and creativity helps people tap into their emotions and understand them through the creative process. Therefore, I took a compilation of photographs documenting the creative processes of three different groups of people. These photographs allowed me to capture the visual expressions of the people who partake in art therapy and how they use this therapeutic tool of creating art.

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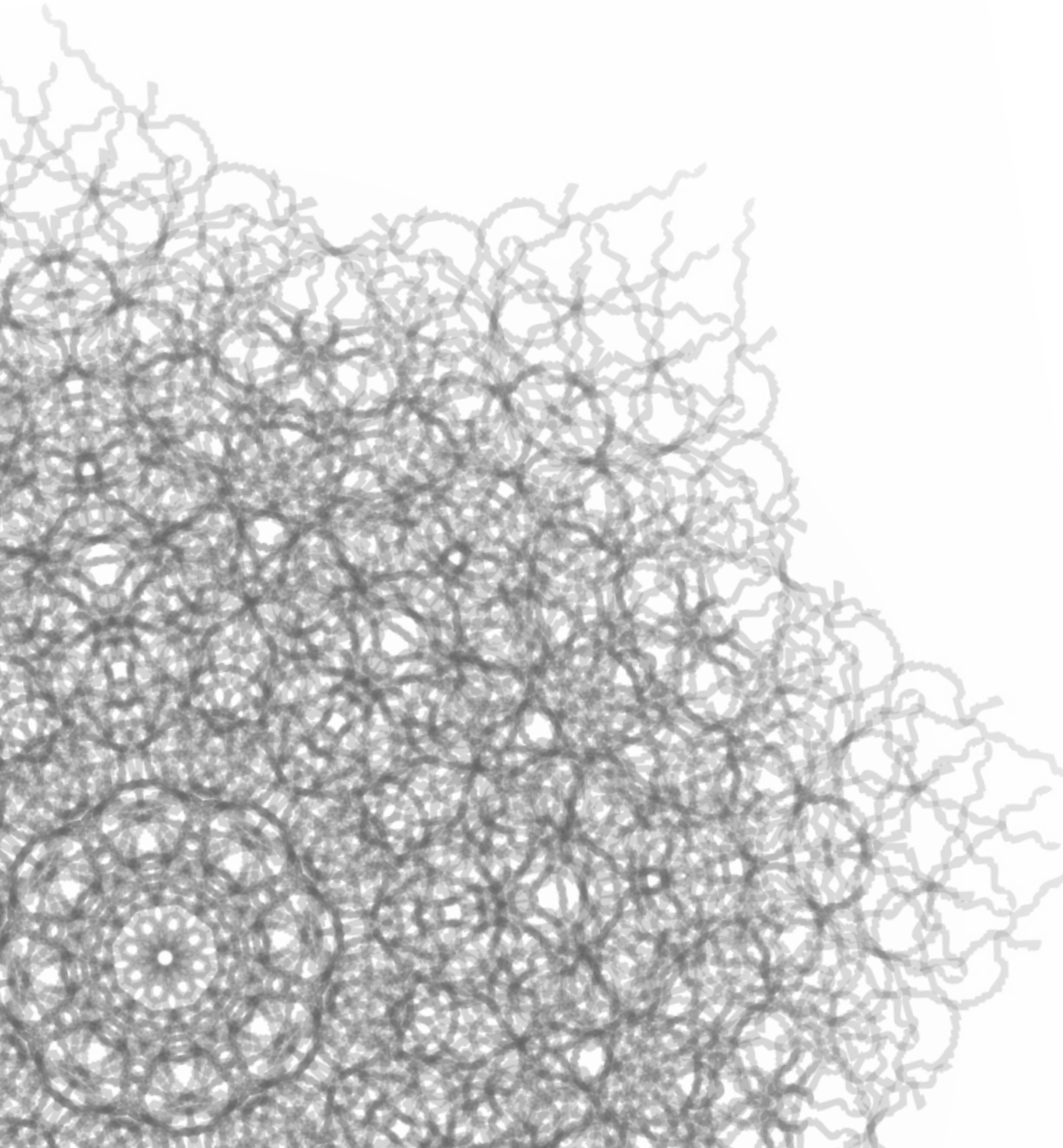

PRESENTER INDEX

NAME	TITLE	LOCATION/TIME
Brennan, Erin N (POL)	Human Trafficking: An Explanation of Forced Labor	RecPlex, 11:00 AM-12:30 PM
Brito, Daniel (ESM)	Understanding Best Practice of College Student Athletic Department Support Groups	LTC - Team Space, 1:20 PM-1:40 PM
Brizzi, Alexandra R (UED)	Syntheses of Research on School Curriculum	RecPlex, 11:00 AM-12:30 PM
Broge, Andrea M (INB, OPS)	OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 1 of 3	Miriam Hall - 104, 11:00 AM-12:00 PM
Brooke, Sara K (SOC)	Fitting In: Body Image within Sorority life at the University of Dayton.	St. Joe's - 13, 1:00 PM-2:00 PM
Brough, Christopher B (POL)	Examining religious exemptions to general laws	St. Joe's - 23, 2:00 PM-3:00 PM
Brown, Brandy M (ESM)	Communication Tactics in Information Technology	RecPlex, 11:00 AM-12:30 PM
Brubaker, Matthew A (EDL)	Social Justice and the Black - White Achievement Gap	RecPlex, 11:00 AM-12:30 PM
Bruce, Kathryn M (INS, SPN)	Delivering Justice in Multicultural and Multiethnic societies	St. Joe's - 23, 3:00 PM-4:00 PM
Bruns, Brendan W (ENT, MKT)	Flyer For-ex Fund	RecPlex, 11:00 AM-12:30 PM
Buccini, Michela A (ECP)	First-Generation Students and Retention at the University of Dayton	LTC - Team Space, 4:30 PM-6:30 PM
Buckley, John J (UNA)	Ethnographies of Non-profit Organizations Confronting Food Insecurity	ArtStreet - Studio B, 2:00 PM-4:30 PM
Buckley, Liam G (MEE)	Enhancing Adolescent Development through Service Learning	RecPlex, 11:00 AM-12:30 PM
Buerschen, John H (MED)	Fostering Literacy in Dayton City Schools	RecPlex, 11:00 AM-12:30 PM
Burg, Ryan T (OPS)	OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 2 of 3	Miriam Hall - 104, 1:00 PM-2:00 PM
Buroker, Emily J (MKT)	The Difference We Make is in the Doing.	RecPlex, 11:00 AM-12:30 PM
Buse, Matthew J (FIN, ECB)	How Markets and Organizations Fail: Exploring Illusions of Harmony, Predictability, Stability and Rationality	Miriam Hall -103, 8:00 AM-1:00 PM
Buse, Matthew J (FIN, ECB)	S&P Valuation Modeling: An Empirical Analysis 1999-2011	RecPlex, 11:00 AM-12:30 PM
Bush, Amy N (SOC)	We Remember... the Holocaust and Other Genocides	KU - Torch Lounge, NO TIME SET
Bush, Amy N (SOC)	Human Trafficking: An Explanation of Forced Child Labor.	RecPlex, 11:00 AM-12:30 PM
Butts, John C (UNS, BIO)	An evolutionary characterization of regulatory linkages in a genetic network for an evolved fruit fly trait.	RecPlex, 9:00 AM-10:30 AM
Caldwell, Lydia K (EES)	The Influence of Specific Gait Modifications on Medial Knee Loading and Metabolic Cost	KU - 331, 3:00 PM-3:20 PM
Callahan, Grace M (EYA)	Efficiency, Adequacy, and Equity in Educational Funding: A Review of the Literature.	RecPlex, 9:00 AM-10:30 AM
Callihan, Lindsey M (CME)	The Challenges, Frustrations, Triumphs and Terrors of Starting and Maintaining a Social Justice Club at UD.	RecPlex, 9:00 AM-10:30 AM
Calteaux, Alexandra E (BIO)	Scavenging Effects on Carrion Decomposition (SSI: Swine Scene Investigation)	RecPlex, 9:00 AM-10:30 AM
Camerota, Catherine G (FIN)	Identifying upside and downside performance potential for Flyer Fund Stocks in the high volatile market period, 2007-2011.	RecPlex, 9:00 AM-10:30 AM
Camino, Eric M (BIO)	The bab Locus Model for Synergistic Gene Regulatory Interactions in Development and Evolution	RecPlex, 9:00 AM-10:30 AM
Capicotto, Brandon M (FIN, ECB)	..A Linear Probability Model of the Likelihood of Positive Returns for the S&P 500 Sectors, 2005-2001	RecPlex, 9:00 AM-10:30 AM
Capka, Joseph J (FIN, ECB, SPN)	....ROA and ROE as Determinants of Quality in Portfolio Management	Miriam Hall - 213, 2:20 PM-2:40 PM
Capka, Joseph J (FIN, ECB, SPN)	....ROA and ROE as Determinants of Quality in Portfolio Management	RecPlex, 9:00 AM-10:30 AM
Carcione, Christopher M (ENT, MKT)	...UD Business Plan Competition: Insights from the Finalists	Miriam Hall - 109, 11:00 AM-12:00 PM
Carcione, Christopher M (ENT, MKT)	...The SOE-SBA Entrepreneurship Collaboration: High-tech innovation projects and insights from B-School students on their experiences	Miriam Hall - 109, 2:20 PM-3:20 PM
Carlson, Megan C (INS)	How Markets and Organizations Fail: Exploring Illusions of Harmony, Predictability, Stability and Rationality	Miriam Hall -103, 8:00 AM-1:00 PM
Carroll, Matthew D (CEE)	Department of Civil and Environmental Engineering and Engineering Mechanics Senior Capstone Presentation: Miami Valley Pointe	KU Boll Theatre, 9:00 AM-12:00 PM
arter, Andrew W (HST)	Eamon de Valera and the Rise of Fianna Fail	RecPlex, 11:00 AM-12:30 PM
Caruso, Anthony (ACC, FIN)	An Analysis of Risk Adjusted Returns for Flyer Fund Stocks Over the Period 2007-2011	RecPlex, 9:00 AM-10:30 AM
Castell, Gregory J (FIN)	Do Dividends Matter: An empirical analysis of the impact of dividends on portfolio stock selection, portfolio weights, and portfolio returns for S&P 500 .. stocks over the period 2005-2010	Miriam Hall - 213, 2:40 PM-3:00 PM
Castleton, Jonathan W (FIN)	Modeling the Optimal Asset Allocation Based on the Markowitz Modern Portfolio Theory	Miriam Hall - 213, 3:40 PM-4:40 PM
Caufield, Torrie L (PSY)	Anxious Attachment, Silencing the Self, and Relationship Satisfaction	RecPlex, 9:00 AM-10:30 AM
Cenedella, Carly A (POL, HRS)	Human Rights in U.S. Foreign Policy	Marianist Hall Learning Space - 206, 2:00 PM-3:00 PM
Cerilli, Nicola (MCM)	Discovering Peace in Dayton	RecPlex, 11:00 AM-12:30 PM
Chan, Ming Yue (PSY)	Predictors of Cell-phone Driving: A Theory of Planned Behavior Approach	RecPlex, 9:00 AM-10:30 AM
Chapman, Christina R (MIS)	itelligence Project Management System	Miriam Hall - 207, 1:15 PM-1:30 PM
Chapman, Julia I (GIS)	Beta diversity dynamics across topographic gradients in the herbaceous layer of an old-growth deciduous forest	KU - 211, 3:40 PM-4:00 PM
Chapman, Kathryn C (OPS)	OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 2 of 3	Miriam Hall - 104, 1:00 PM-2:00 PM
Charbonneau, Lauren L (BIO)	Temporal and Spatial Distribution of an Anuran Chytrid Fungus: Comparison of the Amphibians from Fragmented Forests in Hardin County, Ohio	RecPlex, 9:00 AM-10:30 AM
Chen, Chin Yi (INS)	U.S. Foreign Policy in an Era of Change	Marianist Hall Learning Space - 217, 1:00 PM-4:00 PM
Chen, Chong (ELE)	Accelerating Robotic Arm Calibration on GPGPUs	RecPlex, 9:00 AM-10:30 AM
Cheng, Wu (ELE)	Corrupted Reference Image Quality Assessment	KU - 312, 1:40 PM-2:00 PM
Chengelis, Alexander J (ECB, BIO, FIN)	...How Markets and Organizations Fail: Exploring Illusions of Harmony, Predictability, Stability and Rationality	Miriam Hall -103, 8:00 AM-1:00 PM
Chiara, Charles (EVB, INS)	Hershner Preserve Wetland Restoration	RecPlex, 9:00 AM-10:30 AM
Christy, Annie R (EMS)	Topics in Contemporary Modern Africa	KU - 331, 1:00 PM-3:00 PM
Christy, Megan E (MKT)	The P&G Marketing Challenge	Miriam Hall - 214, 2:20 PM-3:20 PM
Ciesa, Michael W (BIO)	Infectious Disease Mathematical Modeling of the 2001 Foot and Mouth Outbreak	RecPlex, 11:00 AM-12:30 PM
Cipiti, Thomas M (EYA)	Enhancing Adolescent Development through Service Learning	RecPlex, 11:00 AM-12:30 PM

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NAME	TITLE	LOCATION/TIME
Detrude, Danielle L (ENT, MKT)	The SOE-SBA Entrepreneurship Collaboration: High-tech innovation projects and insights from B-School students on their experiences	Miriam Hall - 109, 2:20 PM-3:20 PM
Devlin, Catherine E (PSY)	Measuring Spatial Intelligence and Memory for Location in Athletes	RecPlex, 9:00 AM-10:30 AM
Dewitt, Melissa C (EPT)	Positions in Health and Sport Science	RecPlex, 11:00 AM-12:30 PM
Dickson, Sarah L (INB)	Working Together for a Greater Tomorrow	RecPlex, 11:00 AM-12:30 PM
Diddle, Kristen R (ELE)	Creating the RecBikes Program and Imagining the Future of Biking at U.D.	KU - 310, 1:00 PM-2:00 PM
Digby, Alexandria L (CMM)	Sexual Assault on College Campus	RecPlex, 11:00 AM-12:30 PM
Dimaio, Gabrielle M (MKT)	Observing Communication Practices in the Davis Center for Portfolio Management	RecPlex, 11:00 AM-12:30 PM
Dobbins, Kyle R (CEE)	Department of Civil and Environmental Engineering and Engineering Mechanics Senior Capstone Presentation: Miami Valley Pointe	KU Boll Theatre, 9:00 AM-12:00 PM
Dogal, Michael M (CME)	Developing Each Child Academically: Applying Marianist Ideals	RecPlex, 11:00 AM-12:30 PM
Dolecki, Nicholas A (ACC, OPS, BUS)	OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 3 of 3	Miriam Hall - 104, 2:20 PM-3:20 PM
Dombrowski, Nathan C (DEN)	Structural Functionalism in Schools	LTC - Forum, 2:00 PM-2:20 PM
Donnelly, Kevin M (CME)	The Effect of Heat Treatment and Surface Functionalization on the Bio-Kinetic Behavior of Carbon Nanomaterials	RecPlex, 9:00 AM-10:30 AM
Donohue, Josh M (INS)	Topics in Contemporary Modern Africa	KU - 331, 1:00 PM-3:00 PM
Donohue, Laura A (ENG)	Syntheses of Research on School Curriculum	RecPlex, 11:00 AM-12:30 PM
Doster, Peter J (CEE)	Department of Civil and Environmental Engineering and Engineering Mechanics Senior Capstone Presentation: Miami Valley Pointe	KU Boll Theatre, 9:00 AM-12:00 PM
Douglas, Mariah L (CMM, ENG)	Examining religious exemptions to general laws	St. Joe's - 23, 2:00 PM-3:00 PM
Doyle, Nicholas M (EYA)	Topics in Contemporary Modern Africa	KU - 331, 1:00 PM-3:00 PM
Drabenstot, Tyler R (CJS)	DARE to Question Our Countries Juvenile Drug Programs	St. Joe's - 25, 3:00 PM-4:00 PM
Drabenstot, Tyler R (CJS)	Pardon Me: An Inquiry Into the Executive Clemency System in Ohio	St. Joe's - 25, 3:00 PM-4:00 PM
Drabenstot, Tyler R (CJS)	The CSI effect: A Study in the Perceptions of Crime	St. Joe's - 25, 3:00 PM-4:00 PM
Dresden, Philip K (CEE)	Department of Civil and Environmental Engineering and Engineering Mechanics Senior Capstone Presentation: Miami Valley Pointe	KU Boll Theatre, 9:00 AM-12:00 PM
Dresmann, Samantha M (EEP)	This display is about these career fields projected 10 years into the future: Exercise Physiology, Athletic Training, Occupational Therapy and Physical Therapy	RecPlex, 11:00 AM-12:30 PM
Driscoll, Michael P (EEP)	Health and Sports Science Career Paths	RecPlex, 9:00 AM-10:30 AM
Dunleavy, Joshua R (CJS)	Human Trafficking: An Explanation of Forced Labor	RecPlex, 11:00 AM-12:30 PM
Dunleavy, Joshua R (CJS)	DARE to Question Our Countries Juvenile Drug Programs	St. Joe's - 25, 3:00 PM-4:00 PM
Dunleavy, Joshua R (CJS)	Pardon Me: An Inquiry Into the Executive Clemency System in Ohio	St. Joe's - 25, 3:00 PM-4:00 PM
Dunleavy, Joshua R (CJS)	The CSI effect: A Study in the Perceptions of Crime	St. Joe's - 25, 3:00 PM-4:00 PM
Duolan, Xxx (FIN)	Ethnographies of Non-profit Organizations Confronting Food Insecurity	ArtStreet - Studio B, 2:00 PM-4:30 PM
Durnwald, Libby M (SPN)	Syntheses of Research on Differences Across Schools and Classrooms	RecPlex, 11:00 AM-12:30 PM
Durst, Melissa A (MUE, UED)	Assessing Growth of Grades Six Through Eight Ohio Music Students and the Effectiveness of their Teachers	RecPlex, 9:00 AM-10:30 AM
Duthie, Kellsy E (CJS)	Ethnographies of Non-profit Organizations Confronting Food Insecurity	ArtStreet - Studio B, 2:00 PM-4:30 PM
Dvorsky, Jared N (ESM)	Understanding Best Practice of College Student Athletic Department Support Groups	LTC - Team Space, 1:20 PM-1:40 PM
Earl, Katherine A (PSY)	The Mediating Effects of Rumination on the Relationship between Perfectionism and Self-forgiveness	RecPlex, 9:00 AM-10:30 AM
Edison, Margaret M (EYA, MTH)	Cultural Competence: A Personal Journey to Becoming a Culturally Relevant Educator	RecPlex, 9:00 AM-10:30 AM
Edmundson, Charles B (RCL, MEE)	Become a world citizen with the School of Business Administration Summer Study Abroad, Semester Exchange, ETHOS (Engineers in Technical Humanitarian Opportunities of Service Learning, and other programs.	Miriam Hall - 119 (O'Leary), 11:00 AM-2:00 PM
Edmundson, Joseph M (OPS)	Topics in Contemporary Modern Africa	KU - 331, 1:00 PM-3:00 PM
Edwards, Sarah F (INS, FRN)	Banning the Burqa: France and the specter of Colonialism	RecPlex, 9:00 AM-10:30 AM
Effler, Luke A (ART)	Fin	ArtStreet - Studio C, 2:40 PM-3:40 PM
Egan, Magdalene L (ECE)	Syntheses of Research on Gender Segregation in Schools	RecPlex, 11:00 AM-12:30 PM
Eidson, Tyler J (CJS)	Human Trafficking: An Explanation of Child Soldiers	RecPlex, 11:00 AM-12:30 PM
Eidson, Tyler J (CJS)	Concealed on Campus: Should students and faculty with a concealed carry permit be allowed to carry firearms on Ohio college campuses?	St. Joe's - 25, 2:00 PM-3:00 PM
Eidson, Tyler J (CJS)	The Mental Crisis: The use of CIT training for college law enforcement agencies	St. Joe's - 25, 2:00 PM-3:00 PM
Eidson, Tyler J (CJS)	How Limitations Placed on University Police Affect the Campus Perception of Law Enforcement	St. Joe's - 25, 2:00 PM-3:00 PM
Eisses, Cole T (FIN, ECB)	How Markets and Organizations Fail: Exploring Illusions of Harmony, Predictability, Stability and Rationality	Miriam Hall -103, 8:00 AM-1:00 PM
Elbin, Wyatt P (RCL)	Become a world citizen with the School of Business Administration Summer Study Abroad, Semester Exchange, ETHOS (Engineers in Technical Humanitarian Opportunities of Service Learning, and other programs.	Miriam Hall - 119 (O'Leary), 11:00 AM-2:00 PM
Elderkin, Rebecca M (HST, POL)	Slavery through the Ages; An Historical Narrative on Bondage and Ideology and the Institution of Slavery Today	KU - 311, 1:00 PM-1:20 PM
Elisha, Elizabeth A (MKT, OPS)	OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 1 of 3	Miriam Hall - 104, 11:00 AM-12:00 PM
Ely, Kimberly M (EPT)	Career Opportunities in the Health and Sports Science Department	RecPlex, 11:00 AM-12:30 PM
Enlow, Paul T (PSY)	The Effects of Social Support on Adjustment to College	RecPlex, 9:00 AM-10:30 AM
Erbs, Kevin T (POL)	Human Trafficking: An Explanation of Debt Bondage among Migrant Laborers.	RecPlex, 11:00 AM-12:30 PM
Erhart, Lauren E (MUT)	Vocation: Creating a Masterpiece	Alumni Hall - 101, 1:00 PM-2:00 PM
Essien, Nnimnoabasi E (PSY)	Performance and Assessment of Accuracy in a Visual Sustained Attention Task	RecPlex, 9:00 AM-10:30 AM

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NAME	TITLE	LOCATION/TIME
Gansel, Allison R (BIO)	Hydroperiod Influence on Bacterial Communities Assessed by Way of Metabolic Profiling	KU - 211, 2:40 PM-3:00 PM
Gao, Jian (EOP)	Experimental Confirmation of Strong Fluorescence Enhancement Using One-dimensional GaP/SiO2 Photonic Band Gap Structure	RecPlex, 9:00 AM-10:30 AM
Garcia, Sariana L (POL, INS)	US Immigration: The Power Struggle Between the States and Federal Government	RecPlex, 9:00 AM-10:30 AM
Garraton, Miguel R (ECB, INB)	How Markets and Organizations Fail: Exploring Illusions of Harmony, Predictability, Stability and Rationality	Miriam Hall -103, 8:00 AM-1:00 PM
Gatlin, Emily D (MUE)	Student Songwriting Concert: Guitar Students of Jim McCutcheon	KU Boll Theatre, 3:00 PM-4:00 PM
Gayda, Joseph A (CEE)	Department of Civil and Environmental Engineering and Engineering Mechanics Senior Capstone Presentation: Miami Valley Pointe	KU Boll Theatre, 9:00 AM-12:00 PM
Geib, Molly A (PHO)	Senior Capstone Projects in Photography	ArtStreet - Studio B, 1:00 PM-2:00 PM
Gekeler, Logan S (CEE)	Ethnographies of Non-profit Organizations Confronting Food Insecurity	ArtStreet - Studio B, 2:00 PM-4:30 PM
Geng, Tianyang (FIN)	Ethnographies of Non-profit Organizations Confronting Food Insecurity	ArtStreet - Studio B, 2:00 PM-4:30 PM
Gerace, Gerard A (VCD)	Visual Identity: A Problem-solving Approach to Identity Design	ArtStreet - Studio E, 2:00 PM-3:00 PM
Gerker, Anne K (PHO)	Senior Capstone Projects in Photography	ArtStreet - Studio B, 1:00 PM-2:00 PM
Gianaras, Elizabeth P (ECB, FIN)	Become a world citizen with the School of Business Administration Summer Study Abroad, Semester Exchange, ETHOS (Engineers in Technical Humanitarian Opportunities of Service Learning, and other programs.	Miriam Hall - 119 (O'Leary), 11:00 AM-2:00 PM
Gilbert, Stephen F (INB)	Flyer Enterprises: The Blend, A Business Communications Study	RecPlex, 11:00 AM-12:30 PM
Gillespie, Maggie (EYA, EAH)	The pro-social attitudes of sophomore men at the University of Dayton	LTC - Team Space, 4:30 PM-6:30 PM
Girouard, Samuel B (MKT, FIN)	An Analysis of Risk Adjusted Returns for Flyer Fund Stocks Over the Period 2007-2011	RecPlex, 9:00 AM-10:30 AM
Glass, Lauren K (INS)	Vocation: Creating a Masterpiece	Alumni Hall - 101, 1:00 PM-2:00 PM
Glavac, Olivia N (EPT)	The Projected Future of Various Careers in the Health Field for the Next 10 Years - Includes Personal Training, Occupational Therapy, Pediatric Physical Therapy, and Orthopedic Physical Therapy	RecPlex, 11:00 AM-12:30 PM
Globig, Anne M (FIN, OPS)	OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 2 of 3	Miriam Hall - 104, 1:00 PM-2:00 PM
Gloekler, Gabrielle M (MKT, MIS)	Learning as a Way of Service	RecPlex, 11:00 AM-12:30 PM
Godby, Anna L (CMM)	The Many Different Faces of Modern Day Slavery	KU - 310, 2:00 PM-3:20 PM
Godby, Anna L (CMM)	Who Is a Journalist?	RecPlex, 11:00 AM-12:30 PM
Goins, Sean M (BIO)	Disturbance and Dynamics in an Old-Growth Forest Remnant in Western Ohio	KU - 312, 2:40 PM-3:00 PM
Gonzalez Pedrol, Nuria Eugenia (NON)	U.S. Foreign Policy in an Era of Change	Marianist Hall Learning Space - 217, 1:00 PM-4:00 PM
Gonzalez, Belmari (PLW, INS, POL)	Our Contribution to Slavery as Consumers	KU - 311, 1:40 PM-2:00 PM
Gonzalez, Belmari (PLW, INS, POL)	U.S. Foreign Policy in an Era of Change	Marianist Hall Learning Space - 217, 1:00 PM-4:00 PM
Gonzalez, Katherine (INS, SPN)	Dayton Civic Scholars Senior Capstone Project	LTC - Studio, 3:00 PM-4:00 PM
Gorman, Timothy T (PHY)	Measuring Alpha-particle Charge to Mass Ratio using a Cloud Chamber	RecPlex, 11:00 AM-12:30 PM
Gottron, Erin E (FAE)	Fin	ArtStreet - Studio C, 2:40 PM-3:40 PM
Gove, Brianna N (OPS, MIS)	OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 3 of 3	Miriam Hall - 104, 2:20 PM-3:20 PM
Gove, Brianna N (OPS, MIS)	T & T Graphics Customer Ordering System	Miriam Hall - 207, 1:45 PM-2:00 PM
Grabowski, Kyle M (CJS)	Destination Dayton: Dayton Civic Scholar Junior Cohort Capstone Project	KU - 222, 2:20 PM-3:00 PM
Grabowski, Kyle M (CJS)	Destination Dayton: Dayton Civic Scholar 2013 Cohort Capstone Project	RecPlex, 9:00 AM-10:30 AM
Graehler, Lauren E (VCD)	Design Science | Science Design: Design Proposal for a Geology Department Mini-Museum	Science Center Auditorium, 3:00 PM-4:00 PM
Grandy, Leah M (SOC)	Lessons Learned: Applying the White Privilege Conference to the University of Dayton	St. Joe's - 13, 11:00 AM-12:00 PM
Grandy, Leah M (SOC)	Managing Emotions and Coping Strategies within Pregnancy Help Centers	St. Joe's - 13, 3:00 PM-4:00 PM
Graves, Kyle G (ECB, MIS)	Superior Abrasives Enterprise Resource Planning System	Miriam Hall - 207, 2:40 PM-3:00 PM
Graves, Kyle G (ECB, MIS)	How Markets and Organizations Fail: Exploring Illusions of Harmony, Predictability, Stability and Rationality	Miriam Hall -103, 8:00 AM-1:00 PM
Greider, Rebecca L (CME)	Artificial Neural Networks and Their Use in Process Monitoring and Diagnosis of an Industrial Injection Molding Process	RecPlex, 9:00 AM-10:30 AM
Griest, Daniel J (CEE)	Department of Civil and Environmental Engineering and Engineering Mechanics Senior Capstone Presentation: Miami Valley Pointe	KU Boll Theatre, 9:00 AM-12:00 PM
Griffey, Brock D (MIS)	Goodrich Test Lab System	Miriam Hall - 207, 1:00 PM-1:15 PM
Gritti, Vincent M (ENT)	Results of operation from two micro-companies of the Sophomore Entrepreneurial Experience Course	Miriam Hall - 109, 3:40 PM-4:40 PM
Groff, Michael R (ENT, FIN)	UD Business Plan Competition: Insights from the Finalists	Miriam Hall - 109, 11:00 AM-12:00 PM
Groff, Michael R (ENT, FIN)	The SOE-SBA Entrepreneurship Collaboration: High-tech innovation projects and insights from B-School students on their experiences	Miriam Hall - 109, 2:20 PM-3:20 PM
Groff, Michael R (ENT, FIN)	The U.S. Economic Outlook for 2012 and Flyer Fund Sector Weights	Miriam Hall - 118 (Davis Center), 1:00 PM-2:00 PM
Group, Steven J (OPS)	OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 3 of 3	Miriam Hall - 104, 2:20 PM-3:20 PM
Gu, Weijie (INB, OPS)	How Markets and Organizations Fail: Exploring Illusions of Harmony, Predictability, Stability and Rationality	Miriam Hall -103, 8:00 AM-1:00 PM
Guisfredi, Monica A (CME)	Appropriate Technology for Extraction of Essential Oils from Orange Peels in La Paz, Bolivia	RecPlex, 9:00 AM-10:30 AM
Gumm, Mark (EDL)	Social Justice and the Black - White Achievement Gap	RecPlex, 11:00 AM-12:30 PM
Guo, Wei (ACC, FIN)	It Takes a Community to Ensure Equality	RecPlex, 11:00 AM-12:30 PM
Gurney, Margaret L (PSY)	Minority Rights and the Movement of Peoples	St. Joe's - 23, 1:00 PM-2:00 PM
Gustafson, Kevin R (CEE)	Ethnographies of Non-profit Organizations Confronting Food Insecurity	ArtStreet - Studio B, 2:00 PM-4:30 PM
Gustin, Keelie M (SOC, WGS)	Where Women and Disability Studies Meet: Research and Practice	KU - East Ballroom, 3:00 PM-4:00 PM
Gustin, Keelie M (SOC, WGS)	Joking as Justification: The Intersectionality of Sexism, Racism, and Ethnic Humor	St. Joe's - 13, 2:00 PM-3:00 PM
Guy, Megan C (MED)	From UD to DECA	RecPlex, 11:00 AM-12:30 PM

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NAME	TITLE	LOCATION/TIME
Hoelter, Emily F (EYA)	Sexual Assault on College Campus	RecPlex, 11:00 AM-12:30 PM
Hoendorf, Kathryn M (ERL, EYA)	Politics of Genocide: Current Research	LTC - Studio, 4:00 PM-5:00 PM
Hoerr, Robert J (UEG)	Student Songwriting Concert: Guitar Students of Jim McCutcheon	KU Boll Theatre, 3:00 PM-4:00 PM
Hoffman, Karoline E (MTH)	Qualitative Study of an SIR epidemic model with an asymptotically homogeneous transmission function	RecPlex, 11:00 AM-12:30 PM
Holdmeyer, Sean O (OPS, LDR)	The Experiences of Flyer Enterprises	Miriam Hall - 214, 11:00 AM-12:00 PM
Holdmeyer, Seth D (MEE)	Developing Each Child Academically: Applying Marianist Ideals	RecPlex, 11:00 AM-12:30 PM
Hollis, Briana M (PSY, CJS)	Destination Dayton: Dayton Civic Scholar Junior Cohort Capstone Project	KU - 222, 2:20 PM-3:00 PM
Hollis, Briana M (PSY, CJS)	Destination Dayton: Dayton Civic Scholar 2013 Cohort Capstone Project	RecPlex, 9:00 AM-10:30 AM
Hollis, Briana M (PSY, CJS)	Torture: Perceptions, Ethics, and Reality	St. Joe's - 25, 4:00 PM-4:40 PM
Hollis, Briana M (PSY, CJS)	Human Trafficking Unveiled: Identifying Traffickers and Bringing Them to Justice	St. Joe's - 25, 4:00 PM-4:40 PM
Homawoo, Jemima A (INS, POL)	We Remember... the Holocaust and Other Genocides	KU - Torch Lounge, 1:30 PM-3:30 PM
Hoos, Mallory C (HST, ENG)	History Matters: Research in Russian and U.S. History	KU - East Ballroom, 1:00 PM-2:00 PM
Hoos, Mallory C (HST, ENG)	Ancient History and Modern Ideology	KU - West Ballroom, 2:00 PM-3:00 PM
Hornick, Brittany J (MED)	Working Together for a Greater Tomorrow	RecPlex, 11:00 AM-12:30 PM
Hoying, Lyndsay J (MUT)	Contemporary,Popular and World Music for the saxophone Quartet	KU, 10:30 AM-12:00 PM
Huelsman, Bryce J (OPS)	OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 2 of 3	Miriam Hall - 104, 1:00 PM-2:00 PM
Hufford, Nicholas J (POL)	The Many Different Faces of Modern Day Slavery	KU - 310, 2:00 PM-3:20 PM
Hujik, Tyler C (FIN, ECB)	The U.S. Economic Outlook for 2012 and Flyer Fund Sector Weights	Miriam Hall - 118 (Davis Center), 1:00 PM-2:00 PM
Hunn, Ryan D (ACC, FIN)	The Challenges, Frustrations, Triumphs and Terrors of Starting and Maintaining a Social Justice Club at UD.	RecPlex, 9:00 AM-10:30 AM
Hunn, Ryan D (ACC, FIN)	A Linear Probability Model of the Likelihood of Positive Returns for the S&P 500 Sectors, 2005-2001	RecPlex, 9:00 AM-10:30 AM
Hurlburt, Daniel A (PSY)	Evaluations of Aesthetics of Faces in Portraits and Photographs	RecPlex, 9:00 AM-10:30 AM
Hurtubise, Matt D (MEE)	Helping Angels Find Their Wings	RecPlex, 11:00 AM-12:30 PM
Huttinger, Ryan M (MCM)	Effects of Dietary Regimen on Lifespan and Fecundity of Blow Fly, Lucilia sericata (Diptera: Calliphoridae)	RecPlex, 9:00 AM-10:30 AM
Ibbotson, Caroline M (HST)	The Classical Influence: The Design of American University Campuses, the University of Dayton, and the Ideals of American Society	KU - 222, 2:00 PM-2:20 PM
Ibbotson, Caroline M (HST)	Nationalist Political Violence in Ireland: The Land League, the Easter Rising, and the Public Safety Act of 1923	Marianist Hall Learning Space - 218, 3:00 PM-4:00 PM
Imwalle, Winston E (ENT, FIN)	The SOE-SBA Entrepreneurship Collaboration: High-tech innovation projects and insights from B-School students on their experiences	Miriam Hall - 109, 2:20 PM-3:20 PM
Inkrott, Laura A (EDL)	Social Justice and the Black - White Achievement Gap	RecPlex, 11:00 AM-12:30 PM
Iskander, Jeannette M (CLP)	Parental Sensitivity to Child Anxiety Problems: An Examination of Child, Family, and Demographic Influences	RecPlex, 9:00 AM-10:30 AM
Ivas, Jeffrey P (CJS)	The Forgotten Families? An in-depth Exploration of the Perceptions of Public Child Welfare Employees on the Effects of Parental Incarceration on Families	St. Joe's - 25, 1:00 PM-2:00 PM
Ivas, Jeffrey P (CJS)	DEA vs. the World: Can the Illegal Drug Trade in Afghanistan be Stopped?	St. Joe's - 25, 1:00 PM-2:00 PM
Jabre, Stephanie M (MUE)	Edison After School Music Program: A Field Experience Volunteering With Inner City Youth	RecPlex, 9:00 AM-10:30 AM
Jabre, Stephanie M (MUE)	Honors Recital Audition	Sears Recital Hall, 1:00 PM-3:00 PM
Jacob, Daniel T (OPS)	OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 1 of 3	Miriam Hall - 104, 11:00 AM-12:00 PM
Janosko, Laura A (PSY)	Visual Distance Cues Used for Relative Distance Judgments in 2D Displays	RecPlex, 9:00 AM-10:30 AM
Janosko, Laura A (PSY)	Measuring Spatial Intelligence and Memory for Location in Athletes	RecPlex, 9:00 AM-10:30 AM
Jennings, Alan L (ELE)	Memory-Based Motion Optimization for Unbounded Resolution	RecPlex, 9:00 AM-10:30 AM
Jiang, Chenxi (LDR)	Ethnographies of Non-profit Organizations Confronting Food Insecurity	ArtStreet - Studio B, 2:00 PM-4:30 PM
Jipson, Kathleen E (HRS, POL)	We Remember... the Holocaust and Other Genocides	KU - Torch Lounge, 1:30 PM-3:30 PM
Johanek, Rachael A (CME)	Rehabilitation Engineering: Design of a Shower Transfer Seat	RecPlex, 9:00 AM-10:30 AM
Johnson, Christopher M (ECP)	Student Involvement and Alcohol Consumption	LTC - Team Space, 4:30 PM-6:30 PM
Johnson, Henry A (CME)	Ethnographies of Non-profit Organizations Confronting Food Insecurity	ArtStreet - Studio B, 2:00 PM-4:30 PM
Johnson, Jungmi (MTH)	Mathematical Study of the Foot and Mouth Outbreak Model	RecPlex, 11:00 AM-12:30 PM
Johnson, McLean I (HRS, POL)	Creating the RecBikes Program and Imagining the Future of Biking at U.D.	KU - 310, 1:00 PM-2:00 PM
Jones, Amanda N (CMM)	Vocation: Creating a Masterpiece	Alumni Hall - 101, 1:00 PM-2:00 PM
Jones, Bernard D (SOC)	Dayton Civic Scholars Senior Capstone Project	LTC - Studio, 3:00 PM-4:00 PM
Jones, Bernard D (SOC)	Lessons Learned: Applying the White Privilege Conference to the University of Dayton	St. Joe's - 13, 11:00 AM-12:00 PM
Jones, Bernard D (SOC)	The Epidemic of Higher Education among African Americans in their Collegiate Success	St. Joe's - 13, 2:00 PM-3:00 PM
Jones, Rachel (EES)	How the Future Looks for Your First Career Job	RecPlex, 11:00 AM-12:30 PM
Jordan, Sara A (MTH)	The Hindemith Sonata for Four Horns: A Lecture Recital	Sears Recital Hall, 3:30 PM-4:30 PM
Jorgensen, Heather N (ENT, FIN, OPS)	OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 1 of 3	Miriam Hall - 104, 11:00 AM-12:00 PM
Juhnke, Kimberly L (HST, HRS)	History Matters: Research in Russian and U.S. History	KU - East Ballroom, 1:00 PM-2:00 PM
Jules, Alexander P (MEE)	Rehabilitation Engineering: Design of a Shower Transfer Seat	RecPlex, 9:00 AM-10:30 AM
Juniewicz-Fogle, Corey L (UBU)	Leadership and Service: A Social Justice Approach	RecPlex, 11:00 AM-12:30 PM
Kagai, Patrick Wanderi (ETL)	Social Justice and the Black - White Achievement Gap	RecPlex, 11:00 AM-12:30 PM
Kahlig, Aaron (CEE)	Department of Civil and Environmental Engineering and Engineering Mechanics Senior Capstone Presentation: Miami Valley Pointe	KU Boll Theatre, 9:00 AM-12:00 PM

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NAME	TITLE	LOCATION/TIME
Kwarteng, Emil B (MIS)	ISUS Social Media System	Miriam Hall - 207, 1:30 PM-1:45 PM
Kwon, Hailey (MED)	Drinking for Change: Dayton Aquifer, Bottled Water, Student Choices and Your Ideas	KU - East Ballroom, 2:00 PM-3:00 PM
Kwon, Hailey (MED)	A model to study the influence of Hippo signaling on local cell-cell interactions.	RecPlex, 9:00 AM-10:30 AM
Lammers, Tricia (ENT, MKT)	UD-SBA Flyer Angels: Student insights from a year of making high-tech private equity investments	Miriam Hall - 109, 1:00 PM-2:00 PM
Lamusga, Michelle L (EHA)	Career Opportunities in the Health and Sports Science Department	RecPlex, 11:00 AM-12:30 PM
Lang, Jennifer M (BIO)	Response of Invertebrate Grazers to the Influence of Abiotic Factors on Epilithic Biofilm Development	KU - 211, 3:00 PM-3:20 PM
Larkin, Patrick J (EYA, MEE)	Topics in Contemporary Modern Africa	KU - 331, 1:00 PM-3:00 PM
Lauden, Jonathan W (MEE)	Novel Concepts for Spring-Based Mechanical Energy Storage in Motor Vehicles	RecPlex, 9:00 AM-10:30 AM
Lazcano, Mark A (EYA)	Nationalist Political Violence in Ireland: The Land League, the Easter Rising, and the Public Safety Act of 1923	Marianist Hall Learning Space - 218, 3:00 PM-4:00 PM
Leaver, Jamie A (HRS)	Human Trafficking: An Explanation of Forced Child Labor.	RecPlex, 11:00 AM-12:30 PM
Leavy, Elizabeth C (MKT, LDR)	The P&G Marketing Challenge	Miriam Hall - 214, 2:20 PM-3:20 PM
Lee, Mark W (CEE)	Department of Civil and Environmental Engineering and Engineering Mechanics Senior Capstone Presentation: Miami Valley Pointe	KU Boll Theatre, 9:00 AM-12:00 PM
Leigh, Whitney J (CMM)	Human Trafficking: Forced Agricultural Labor in the US	RecPlex, 11:00 AM-12:30 PM
Lesko, Alyssa C (BCM, MTH)	Numerical Study of a Mathematical Model of IL-2 Adoptive Immunotherapy on Patients with Metastatic Melanoma	RecPlex, 11:00 AM-12:30 PM
Lesko, Alyssa C (BCM, MTH)	A model to study the influence of Hippo signaling on local cell-cell interactions.	RecPlex, 9:00 AM-10:30 AM
Lesko, Alyssa C (BCM, MTH)	Functional and Genetic Analysis of Compensatory Responses Induced in Tumors Caused by Loss of Scribble (apical-basal polarity).	RecPlex, 9:00 AM-10:30 AM
Lewis, Danyell R (PSY)	What's in Your Neighborhood? The Progress of Public Neighborhood Center Schools in Dayton and Cincinnati	RecPlex, 9:00 AM-10:30 AM
Lewis, Victoria J (MKT)	Immigration and Refugee Plunge: A Social Justice Learning Living Cohort Community Project	RecPlex, 11:00 AM-12:30 PM
Li, Han (EOP)	Transfer Matrix Approach to Propagation of Angular Plane Wave Spectra Through Metamaterial Multilayer Structures	RecPlex, 9:00 AM-10:30 AM
Li, Li (EOP)	Metal Nanorod Structures: Electromagnetic and quantum confinement properties	RecPlex, 9:00 AM-10:30 AM
Li, Xinyi (ECB)	Ethnographies of Non-profit Organizations Confronting Food Insecurity	ArtStreet - Studio B, 2:00 PM-4:30 PM
Lincoln, Taylor G (ENT, OPS)	Results of operation from two micro-companies of the Sophomore Entrepreneurial Experience Course	Miriam Hall - 109, 3:40 PM-4:40 PM
Liptak, Andrea N (EHA)	Sugar, Sugar: How Much Sweetness Do You Really Need	RecPlex, 9:00 AM-10:30 AM
Little, Josie M (EPT)	Positions in Health and Sport Science	RecPlex, 11:00 AM-12:30 PM
Littlefield, Jane (CMM)	Human Trafficking: An Explanation of Bonded Labor	RecPlex, 11:00 AM-12:30 PM
Liu, Jiapeng (CIS)	Ethnographies of Non-profit Organizations Confronting Food Insecurity	ArtStreet - Studio B, 2:00 PM-4:30 PM
Locasto, Marina S (CJS)	Destination Dayton: Dayton Civic Scholar Junior Cohort Capstone Project	KU - 222, 2:20 PM-3:00 PM
Locasto, Marina S (CJS)	Destination Dayton: Dayton Civic Scholar 2013 Cohort Capstone Project	RecPlex, 9:00 AM-10:30 AM
Loerch, Thomas G (ENT, MKT)	Results of operation from two micro-companies of the Sophomore Entrepreneurial Experience Course	Miriam Hall - 109, 3:40 PM-4:40 PM
Long, Erica M (ECB)	We Remember... the Holocaust and Other Genocides	KU - Torch Lounge, NO TIME SET
Longacre, Kevin (PSY, CJS)	The Effect of Context Upon the Perception of Egocentric Distance Using a Walkable Human Muller-Lyer Illusion	RecPlex, 9:00 AM-10:30 AM
Longacre, Kevin (PSY, CJS)	Decoupling the Biomechanics of Locomotion and the Direction of Spatial Updating During Blind-walking Tasks	RecPlex, 9:00 AM-10:30 AM
Lopes, Mariana (CME)	Flying with Angels	RecPlex, 11:00 AM-12:30 PM
Lopez, Eric P (OPS, ACC, BUS)	OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 2 of 3	Miriam Hall - 104, 1:00 PM-2:00 PM
Loverde, Dominic C (PLW, POL, ECO)	...How Markets and Organizations Fail: Exploring Illusions of Harmony, Predictability, Stability and Rationality	Miriam Hall -103, 8:00 AM-1:00 PM
Lowery, Brandon M (ART)	Fin	ArtStreet - Studio C, 2:40 PM-3:40 PM
Lucas, Katarina A (HRS, POL)	Dayton Civic Scholars Senior Capstone Project	LTC - Studio, 3:00 PM-4:00 PM
Lucas, Kristina L (UNDEF)	Politics of Genocide: Current Research	LTC - Studio, 4:00 PM-5:00 PM
Lucido, Joseph M (EPT)	The Projected Future of Various Careers in the Health Field for the Next 10 Years - Includes Personal Training, Occupational Therapy, Pediatric Physical Therapy, and Orthopedic Physical Therapy	RecPlex, 11:00 AM-12:30 PM
Lundy, Abigail A (OPS)	OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 3 of 3	Miriam Hall - 104, 2:20 PM-3:20 PM
Luo, Ziqian (FIN)	Ethnographies of Non-profit Organizations Confronting Food Insecurity	ArtStreet - Studio B, 2:00 PM-4:30 PM
Lustig, Micah J (MTE)	Topics in Contemporary Modern Africa	KU - 331, 1:00 PM-3:00 PM
Lutz, Stephanie M (UED)	Syntheses of Research on Evaluation of p - 12 Teachers	RecPlex, 11:00 AM-12:30 PM
Lyn, Ryan C (EEP)	Job Outlooks for Various Occupations Within the Health and Sport Science Field	RecPlex, 11:00 AM-12:30 PM
Lynch, Bridget P (PSY)	Do Autonomous Individuals Strive for Self-Positivity? A Test of the Universal Nature of Self-Enhancement	RecPlex, 9:00 AM-10:30 AM
Lynch, Dana S (SOC)	The Use of A Mental Rotation Task to Assess Narcissism and Gender Biases	RecPlex, 9:00 AM-10:30 AM
Lynn, Natalya N (LNG)	The Effect of Context Upon the Perception of Egocentric Distance Using a Walkable Human Muller-Lyer Illusion	RecPlex, 9:00 AM-10:30 AM
Lynn, Natalya N (LNG)	Decoupling the Biomechanics of Locomotion and the Direction of Spatial Updating During Blind-walking Tasks	RecPlex, 9:00 AM-10:30 AM
Ma, Jia Qi (CEE)	Ethnographies of Non-profit Organizations Confronting Food Insecurity	ArtStreet - Studio B, 2:00 PM-4:30 PM
Ma, Xiaodong (ACC)	Ethnographies of Non-profit Organizations Confronting Food Insecurity	ArtStreet - Studio B, 2:00 PM-4:30 PM
Macdonald, Ian J (UBU)	Ethnographies of Non-profit Organizations Confronting Food Insecurity	ArtStreet - Studio B, 2:00 PM-4:30 PM
MacIno, Christopher K (FIN)	Modeling the Optimal Asset Allocation Based on the Markowitz Modern Portfolio Theory	Miriam Hall - 213, 3:40 PM-4:40 PM
Mack, Ellen A (CMM)	Sexual Assault on College Campus	RecPlex, 11:00 AM-12:30 PM
MacKenzie, Kelly A (WGS)	Where Women and Disability Studies Meet: Research and Practice	KU - East Ballroom, 3:00 PM-4:00 PM
MacPherson, Lindsie R (CEE)	Department of Civil and Environmental Engineering and Engineering Mechanics Senior Capstone Presentation: Miami Valley Pointe	KU Boll Theatre, 9:00 AM-12:00 PM

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NAME	TITLE	LOCATION/TIME
Miranda, Giuseppe G (PSY, BIO)	Measuring Spatial Intelligence and Memory for Location in Athletes	RecPlex, 9:00 AM-10:30 AM
Misencik, Bryan P (MKT, OPS)	OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 3 of 3	Miriam Hall - 104, 2:20 PM-3:20 PM
Misencik, Bryan P (MKT, OPS)	Business Communication at ArtStreet Cafe	RecPlex, 11:00 AM-12:30 PM
Mobley, Emily L (EYA)	Syntheses of Research on Differences Across Schools and Classrooms	RecPlex, 11:00 AM-12:30 PM
Moerman, Catherine M (FIN, OPS)	Macro Economic Trends And S&P 500 Sector Returns 2002-2011	RecPlex, 9:00 AM-10:30 AM
Molitor, Joseph G (CLP)	The Effect of the Parent-Adolescent Emotional Context on the Link between Positive Parenting Practices and Adolescent Behavioral Adjustment	RecPlex, 9:00 AM-10:30 AM
Monnier, Phillip M (CEE)	Department of Civil and Environmental Engineering and Engineering Mechanics Senior Capstone Presentation: Miami Valley Pointe	KU Boll Theatre, 9:00 AM-12:00 PM
Montgomery, Sean E (ART)	Fin	ArtStreet - Studio C, 2:40 PM-3:40 PM
Montgomery, Sean E (ART)	Human Trafficking: An Explanation of Child Sex Trafficking.	RecPlex, 11:00 AM-12:30 PM
Moon, Stephanie M (PHL, HST)	Obstacles to Modernization in Ireland	Marianist Hall Learning Space - 218, 1:30 PM-2:00 PM
Mooney, Ryan D (MEE)	Vocation: Creating a Masterpiece	Alumni Hall - 101, 1:00 PM-2:00 PM
Moore, Eryn M (EVB)	Re-establishing Native Flora in a Streamside Forest after Removal of the Invasive Shrub Amur Honeysuckle (Lonicera maackii)	RecPlex, 9:00 AM-10:30 AM
Moran, Joshua D (PSY)	The Use of A Mental Rotation Task to Assess Narcissism and Gender Biases	RecPlex, 9:00 AM-10:30 AM
Moran, Michael T (BIO)	Role of retinal determination genes in amyloid beta 42 mediated neurodegeneration in the Drosophila retina	RecPlex, 9:00 AM-10:30 AM
Morand, Joseph M (MEE)	The Many Different Faces of Modern Day Slavery	KU - 310, 2:00 PM-3:20 PM
Morel, Amanda E (PSY)	Factors that Promote Long-term Memory in the American High School Mathematics Classroom	RecPlex, 9:00 AM-10:30 AM
Morell, Jessica L (EET)	Music and its Affect on Learning and Studying	RecPlex, 9:00 AM-10:30 AM
Morgan, Courtney A (VCD)	Design Science | Science Design: Design Proposal for a Geology Department Mini-Museum	Science Center Auditorium, 3:00 PM-4:00 PM
Morgan, Julianne C (HOA, PHL, WGS)	...Where Women and Disability Studies Meet: Research and Practice	KU - East Ballroom, 3:00 PM-4:00 PM
Moriarty, Michael T (CEE)	Department of Civil and Environmental Engineering and Engineering Mechanics Senior Capstone Presentation: Miami Valley Pointe	KU Boll Theatre, 9:00 AM-12:00 PM
Morris, Erika C (POL)	We Remember... the Holocaust and Other Genocides	KU - Torch Lounge, NO TIME SET
Morris, Erika C (POL)	U.S. Foreign Policy in an Era of Change	Marianist Hall Learning Space - 217, 1:00 PM-4:00 PM
Morris, Kelly E (VCD)	Visual Identity: A Problem-solving Approach to Identity Design	ArtStreet - Studio E, 2:00 PM-3:00 PM
Morris, Matthew S (MUE)	Contemporary,Popular and World Music for the saxophone Quartet	KU, 10:30 AM-12:00 PM
Morris, Zachary D (HST)	Topics in Contemporary Modern Africa	KU - 331, 1:00 PM-3:00 PM
Moses, Kayla L (CJS)	DARE to Question Our Countries Juvenile Drug Programs	St. Joe's - 25, 3:00 PM-4:00 PM
Moses, Kayla L (CJS)	Pardon Me: An Inquiry Into the Executive Clemency System in Ohio	St. Joe's - 25, 3:00 PM-4:00 PM
Moses, Kayla L (CJS)	The CSI effect: A Study in the Perceptions of Crime	St. Joe's - 25, 3:00 PM-4:00 PM
Mossburg, Coriana J (OPS)	OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 1 of 3	Miriam Hall - 104, 11:00 AM-12:00 PM
Mostrom, Alan D (THE)	Baptism and the Interior Process of Salvation in the Theology of Thomas Aquinas	KU - 222, 3:20 PM-3:40 PM
Motz, Emily M (EYA)	Importance of Filter Feeding Organisms for Water Quality	RecPlex, 11:00 AM-12:30 PM
Motz, Emily M (EYA)	Life of Love, Expression of my Vocation	RecPlex, 11:00 AM-12:30 PM
Muddasani, Kavya	Toxic Organic Pollutants from Combustion of Printed Circuit Board Laminates: A Cone Calorimeter Study	RecPlex, 9:00 AM-10:30 AM
Mueller, Eric W (UBU)	Guiding Little Angels: A Literacy Experience at Holy Angels Elementary School	RecPlex, 11:00 AM-12:30 PM
Mullane, Kiley M (HST)	History Matters: Research in Russian and U.S. History	KU - East Ballroom, 1:00 PM-2:00 PM
Mullane, Kiley M (HST)	Ancient History and Modern Ideology	KU - West Ballroom, 2:00 PM-3:00 PM
Mullen, Leah R (EMS)	Topics in Contemporary Modern Africa	KU - 331, 1:00 PM-3:00 PM
Mullen-Muhr, Kristin A (MUE)	Edison After School Music Program: A Field Experience Volunteering With Inner City Youth	RecPlex, 9:00 AM-10:30 AM
Muller, Brett M (MEE)	Ethnographies of Non-profit Organizations Confronting Food Insecurity	ArtStreet - Studio B, 2:00 PM-4:30 PM
Murphy, Kyle R (BIO)	Differential toxicity of silver and titanium dioxide nanoparticles on Drosophila melanogaster development, reproductive effort, and viability: Size, coatings and antioxidants matter	RecPlex, 11:00 AM-12:30 PM
Murphy, Patrick J (UNDEF)	OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 2 of 3	Miriam Hall - 104, 1:00 PM-2:00 PM
Murray, Quinten J (ESM)	Service Learning: Giving Back to the Community While Learning	RecPlex, 11:00 AM-12:30 PM
Murray, Twila G (EAH)	Support, Commitment, and Persistence: Are Students in Supportive Academic Programs More Committed to Their Institutions?	LTC - Team Space, 4:30 PM-6:30 PM
Musser, Jacqueline R (EYA)	From UD to DECA	RecPlex, 11:00 AM-12:30 PM
Mustee, Laura E (MKT)	Creating the RecBikes Program and Imagining the Future of Biking at U.D.	KU - 310, 1:00 PM-2:00 PM
Musuraca, David J (ECO)	How Markets and Organizations Fail: Exploring Illusions of Harmony, Predictability, Stability and Rationality	Miriam Hall -103, 8:00 AM-1:00 PM
Mutyam, Venkateshwar (BIO)	Aquaglyceroporin expression and erythrocyte osmoregulation in cultures from freeze tolerant anuran, Cope's gray treefrog, Hyla chrysoscelis.	RecPlex, 9:00 AM-10:30 AM
Myers, Elizabeth A (WGS, POL)	...Where Women and Disability Studies Meet: Research and Practice	KU - East Ballroom, 3:00 PM-4:00 PM
Myers, Elizabeth A (WGS, POL)	...Addressing Human Rights Abuses in Women's Prisons with a Gender-Responsive Model	LTC - Studio, 1:40 PM-2:00 PM
Nash, Brianna M (ECT)	Ethnographies of Non-profit Organizations Confronting Food Insecurity	ArtStreet - Studio B, 2:00 PM-4:30 PM
Nathaniel, Heather N (CME)	Effects of Pipe Orientation on Multi-phase Flow Patterns	RecPlex, 9:00 AM-10:30 AM
Natke, Christa S (SOC, CJS)	Thinking Errors and Cognitive Distortions Among Juveniles	St. Joe's - 25, 11:00 AM-12:00 PM
Naylor, Craig (ENT)	Results of operation from two micro-companies of the Sophomore Entrepreneurial Experience Course	Miriam Hall - 109, 3:40 PM-4:40 PM

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NAME	TITLE	LOCATION/TIME
Pipik, Amanda M (POL, CMM)	Human Trafficking: An Explanation of Sex Trafficking	RecPlex, 11:00 AM-12:30 PM
Plazibat, Kelly N (CMM)	Sexual Assault on College Campus	RecPlex, 11:00 AM-12:30 PM
Plumlee, Jennifer K (EAH)	Why We Attend School: A Qualitative Retention Study at a Proprietary Higher Education Institution	LTC - Team Space, 4:30 PM-6:30 PM
Pool, Alyssa (EPT)	Developing Each Child Academically: Applying Marianist Ideals	RecPlex, 11:00 AM-12:30 PM
Potocek, Samantha N (EYA)	Syntheses of Research on Extracurricular Activities in p - 12 Schools	RecPlex, 11:00 AM-12:30 PM
Powell, Kiley L (ENT, MKT)	Results of operation from two micro-companies of the Sophomore Entrepreneurial Experience Course	Miriam Hall - 109, 3:40 PM-4:40 PM
Powers, Emily F (ELA)	Study Abroad for Prospective Teachers	RecPlex, 11:00 AM-12:30 PM
Prall, Cristina R (BIO)	The Role of Hemocytes in Shell Formation in the Eastern Oyster, Crassostrea virginica	RecPlex, 9:00 AM-10:30 AM
Price, Nicole E (EYA)	Syntheses of Research on School Policy and the Rights of Individuals	RecPlex, 11:00 AM-12:30 PM
Pryor, Corey R (FIN, ACC)	Buy, Sell or Hold: An In-Depth Look at the Flyer Fund Security Selection Process	Miriam Hall - 118 (Davis Center), 11:00 AM-12:00 PM
Pryor, Corey R (FIN, ACC)	An Analysis of Excess Stock Returns and Fat Tail Distributions for Flyer Fund Stocks in the Volatile Market Period of 2007 - 2011	RecPlex, 9:00 AM-10:30 AM
Przybylowski, Brian E (POL)	We Remember... the Holocaust and Other Genocides	KU - Torch Lounge, 1:30 PM-3:30 PM
Puli, Oorvashi Roy G (BIO)	defective proventriculus (dve), a new member of DV patterning in the eye.	RecPlex, 9:00 AM-10:30 AM
Puli, Oorvashi Roy G (BIO)	Role of defective proventriculus (dve) in Drosophila eye development.	RecPlex, 9:00 AM-10:30 AM
Puslat, Rachel N (UNA)	It Takes a Community to Ensure Equality	RecPlex, 11:00 AM-12:30 PM
Puthoff, Corey J (OPS, FIN)	OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 2 of 3	Miriam Hall - 104, 1:00 PM-2:00 PM
Qiao, Ziqi (FIM)	Idiosyncratic Risks in Different Regimes and The Cross-section of Expected Stock Returns	RecPlex, 9:00 AM-10:30 AM
Qu, Chengwen (CPS, MTH)	Ethnographies of Non-profit Organizations Confronting Food Insecurity	ArtStreet - Studio B, 2:00 PM-4:30 PM
Quinn, Erin K (HST)	Ancient History and Modern Ideology	KU - West Ballroom, 2:00 PM-3:00 PM
Quinn, Patrick (MCT)	Understanding Issues Facing Foreign Nationals Navigating the US Immigration Service	RecPlex, 11:00 AM-12:30 PM
Radisek, Joseph R (MEE)	The Transformation of The Wheels for Kids Organization from a First Year Engineering Design Project to a Year-Long Service Learning Project	RecPlex, 9:00 AM-10:30 AM
Rajaiah, Daniel S (POL)	Understanding Darfur	LTC - Forum, 11:00 AM-12:00 PM
Ramsey, Lisa A (ECO)	Dayton Civic Scholars Senior Capstone Project	LTC - Studio, 3:00 PM-4:00 PM
Ramsey, Lisa A (ECO)	How Markets and Organizations Fail: Exploring Illusions of Harmony, Predictability, Stability and Rationality	Miriam Hall -103, 8:00 AM-1:00 PM
Rankin, Aaron L (POL, HST)	Obstacles to Modernization in Ireland	Marianist Hall Learning Space - 218, 1:30 PM-2:00 PM
Ranz, Elizabeth C (ECB, MIS)	PHP Service Catalog Project	Miriam Hall - 207, 3:00 PM-3:20 PM
Ratycz, Connor (MED)	Dayton Public School: An Ethnographic look at the Socio-economic Culture	KU - 222, 4:00 PM-4:20 PM
Ratycz, Connor (MED)	Effects of Dietary Regimen on Lifespan and Fecundity of Blow Fly, Lucilia sericata (Diptera: Calliphoridae)	RecPlex, 9:00 AM-10:30 AM
Recker, Jacob A (FIN)	Identifying upside and downside performance potential for Flyer Fund Stocks in the high volatile market period, 2007-2011.	RecPlex, 9:00 AM-10:30 AM
Recko, Stephanie A (DPT)	The Effects of a Structured Pedometer Exercise Program on Blood Pressure and BMI of Children Aged 9-12 Years	RecPlex, 9:00 AM-10:30 AM
Reda, Concetta M (POL)	Understanding Darfur	LTC - Forum, 11:00 AM-12:00 PM
Reed, David E (EPT)	Opportunities and Future Career Goals For Our Immediate Career Positions	RecPlex, 11:00 AM-12:30 PM
Reineke, Alexander T (FIN, ENT)	UD Business Plan Competition: Insights from the Finalists	Miriam Hall - 109, 11:00 AM-12:00 PM
Ren, Jun Ai (ACC)	Ethnographies of Non-profit Organizations Confronting Food Insecurity	ArtStreet - Studio B, 2:00 PM-4:30 PM
Renner, Bethany A (ECE)	Creating the RecBikes Program and Imagining the Future of Biking at U.D.	KU - 310, 1:00 PM-2:00 PM
Repic, Katherine B (POL, HST)	Destination Dayton: Dayton Civic Scholar Junior Cohort Capstone Project	KU - 222, 2:20 PM-3:00 PM
Repic, Katherine B (POL, HST)	Destination Dayton: Dayton Civic Scholar 2013 Cohort Capstone Project.	RecPlex, 9:00 AM-10:30 AM
Reuter, Margret F (INS, SPN)	How Markets and Organizations Fail: Exploring Illusions of Harmony, Predictability, Stability and Rationality	Miriam Hall -103, 8:00 AM-1:00 PM
Rey, Adam M (ECO)	How Markets and Organizations Fail: Exploring Illusions of Harmony, Predictability, Stability and Rationality	Miriam Hall -103, 8:00 AM-1:00 PM
Riazzi, Joseph P (MIS)	From UD to DECA	RecPlex, 11:00 AM-12:30 PM
Ridella, Mary E (SOC)	Success in the Non-Profit World: A Case Study of St. Mary Development Corporation	St. Joe's - 13, 3:00 PM-4:00 PM
Ridge, Carly A (EHN)	Community Wellness Services' Interns Present on Lessons Learned During the 2011-2012 School Year	RecPlex, 11:00 AM-12:30 PM
Rindler, Kendra M (CME)	Rehabilitation Engineering: Design of a Shower Transfer Seat	RecPlex, 9:00 AM-10:30 AM
Robbins, Kathryn A (MKT, MIS)	Goodrich Customer Information System	Miriam Hall - 207, 2:20 PM-2:40 PM
Roberts, Joseph G (MED)	A Symbolic Interactive Analysis of Pre-Medical Students Field Experience in Orthopedic Surgery and Athletic Training	RecPlex, 11:00 AM-12:30 PM
Robichaux, Ashley M (EHA)	Health and Sports Science Career Paths	RecPlex, 9:00 AM-10:30 AM
Rocci, Elaine M (SOC)	Patterns and Trends of Juvenile Drug Use	St. Joe's - 13, 4:00 PM-5:00 PM
Rodgers, Kelsey L (EHA)	Opportunities and Future Career Goals For Our Immediate Career Positions	RecPlex, 11:00 AM-12:30 PM
Rodriguez Pintor, Sandra (NON)	Topics in Contemporary Modern Africa	KU - 331, 1:00 PM-3:00 PM
Rodriguez Pintor, Sandra (NON)	U.S. Foreign Policy in an Era of Change	Marianist Hall Learning Space - 217, 1:00 PM-4:00 PM
Rogers, Jared L (MKT, OPS)	OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 3 of 3	Miriam Hall - 104, 2:20 PM-3:20 PM
Rogers, William A (BIO)	The mutations, molecular mechanisms, and constraints directing the evolution of a Drosophila cis-regulatory element	RecPlex, 9:00 AM-10:30 AM
Rogers, William A (BIO)	Identifying cis-regulatory element changes that underlie gene expression and phenotypic evolution between species	RecPlex, 9:00 AM-10:30 AM
Rogerson, Joshua Q (HST)	The Gaelic Revival: Preservation of Irish Culture and Catalyst for Revolutionary Nationalism	Marianist Hall Learning Space - 218, 1:00 PM-1:30 PM
Rolnick, Alexandra J (EHN)	Flying with Angels	RecPlex, 11:00 AM-12:30 PM
Roman, Rebecca L (ART, CMM)	Fin	ArtStreet - Studio C, 2:40 PM-3:40 PM
Rose, Christina J (UET)	Discovering Peace in Dayton	RecPlex, 11:00 AM-12:30 PM
Rose, Elizabeth A (MKT, FIN)	Business Communication at ArtStreet Cafe	RecPlex, 11:00 AM-12:30 PM

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NAME	TITLE	LOCATION/TIME
Seaver, Allison R (ESP)	The International Student Experience Assessment Project	RecPlex, 9:00 AM-10:30 AM
Seggerson, Patrick G (MIS)	Superior Abrasives Enterprise Resource Planning System	Miriam Hall - 207, 2:40 PM-3:00 PM
Sercu, Sarah E (ECE)	Syntheses of Research on Evaluation of p - 12 Teachers	RecPlex, 11:00 AM-12:30 PM
Shaffer, Andrew J (POL, HRS)	U.S. Foreign Policy in an Era of Change	Marianist Hall Learning Space - 217, 1:00 PM-4:00 PM
Shaik, Muneeb Ur Rahman (CME)	Model Formulation and Simulation of a Solid-State Lithium-Based Cell	LTC - Studio, 1:20 PM-1:40 PM
Shamsudin, Shamsul A (MEE)	Designing Planar, Shape-Changing Rigid Body Mechanisms for Profiles with Significant Differences in Arc Length	RecPlex, 9:00 AM-10:30 AM
Shaw, Claire M (EYA, ENG)	Effective Instructional Strategies For Use with Upper-Grade Level Struggling Readers	RecPlex, 11:00 AM-12:30 PM
Shea, Catherine M (PSY)	Human Trafficking: An Explanation of Child Sex Trafficking.	RecPlex, 11:00 AM-12:30 PM
Sheppard, Zachary J (MED)	Service Learning Benefits the Student and the Tutor	RecPlex, 11:00 AM-12:30 PM
Sheridan, Adam D (THL)	The American Technological Imagination: A Critical Evaluation of Thomas Edison In A Secular Age	KU - 331, 3:40 PM-4:00 PM
Sherman, Ashley C (SOC)	The Choices Students Make In a School Cafeteria	St. Joe's - 13, 2:00 PM-3:00 PM
Shewhart, Lauren E (BIO)	Scavenging Effects on Carrion Decomposition (SSI: Swine Scene Investigation)	RecPlex, 9:00 AM-10:30 AM
Shimmin, Kyle D (MEE)	How Markets and Organizations Fail: Exploring Illusions of Harmony, Predictability, Stability and Rationality	Miriam Hall -103, 8:00 AM-1:00 PM
Silverman, Nancy P (EDL)	Educating Toward Attitudes in End of Life Care	RecPlex, 9:00 AM-10:30 AM
Simcic, Lauren A (POL, HRS)	We Remember... the Holocaust and Other Genocides	KU - Torch Lounge, 1:30 PM-3:30 PM
Simcic, Lauren A (POL, HRS)	Dayton Civic Scholars Senior Capstone Project	LTC - Studio, 3:00 PM-4:00 PM
Simcic, Lauren A (POL, HRS)	Human Rights in U.S. Foreign Policy	Marianist Hall Learning Space - 206, 2:00 PM-3:00 PM
Simcic, Lauren A (POL, HRS)	U.S. Foreign Policy in an Era of Change	Marianist Hall Learning Space - 217, 1:00 PM-4:00 PM
Singler, Ryan J (MEE)	Human Trafficking: Forced Agricultural Labor in the US	RecPlex, 11:00 AM-12:30 PM
Sismour, Peter M (PSY)	The Relationship between Narcissism, Overconfidence and Risky Behavior	RecPlex, 9:00 AM-10:30 AM
Sisson, Alia E (POL)	Minority Rights and the Movement of Peoples	St. Joe's - 23, 1:00 PM-2:00 PM
Sitkiewicz, Martha V (MKT)	The P&G Marketing Challenge	Miriam Hall - 214, 2:20 PM-3:20 PM
Sitz, Adam D (PSY)	The Role of Visual and Proprioceptive Limb Information in Object Size and Affordance Judgments	RecPlex, 9:00 AM-10:30 AM
Sitz, Adam D (PSY)	Multimodal Evaluation of Resource Allocation in a Comprehension Task	RecPlex, 9:00 AM-10:30 AM
Sitz, Adam D (PSY)	The Effect of Context Upon the Perception of Egocentric Distance Using a Walkable Human Muller-Lyer Illusion	RecPlex, 9:00 AM-10:30 AM
Sitz, Adam D (PSY)	Decoupling the Biomechanics of Locomotion and the Direction of Spatial Updating During Blind-walking Tasks	RecPlex, 9:00 AM-10:30 AM
Skuse, Anne C (HST)	History Matters: Research in Russian and U.S. History	KU - East Ballroom, 1:00 PM-2:00 PM
Smidt, Alec M (PSY, WGS, SOC)	Where Women and Disability Studies Meet: Research and Practice	KU - East Ballroom, 3:00 PM-4:00 PM
Smith, Abigail A (PSY)	We Remember... the Holocaust and Other Genocides	KU - Torch Lounge, 1:30 PM-3:30 PM
Smith, BaShaun H (ECP)	Students Perception of Alcohol Induced Blackouts at the University of Dayton	LTC - Team Space, 4:30 PM-6:30 PM
Smith, Brooke M (PSY)	Learning as a Way of Leading	RecPlex, 11:00 AM-12:30 PM
Smith, Carson M (CMM)	Service Learning: The Importance of Civic Engagement	RecPlex, 11:00 AM-12:30 PM
Smith, Jacklyn V (PSY)	The Many Different Faces of Modern Day Slavery	KU - 310, 2:00 PM-3:20 PM
Smith, Jill M (UNA)	Learning by Serving Others	RecPlex, 11:00 AM-12:30 PM
Smith, Kyle D (MKT)	Service Learning: Giving Back to the Community While Learning	RecPlex, 11:00 AM-12:30 PM
Smith, Nicholette T (PSY)	Destination Dayton: Dayton Civic Scholar Junior Cohort Capstone Project	KU - 222, 2:20 PM-3:00 PM
Smith, Nicholette T (PSY)	Destination Dayton: Dayton Civic Scholar 2013 Cohort Capstone Project.	RecPlex, 9:00 AM-10:30 AM
Smith, Nicholette T (PSY)	The impact of self-esteem level on the interpretation of ambiguous stimuli after a rejection experience	RecPlex, 9:00 AM-10:30 AM
Smoot, Senia I (MEE)	A Pilot Study of the Effect of an Acute Vestibular Therapy on Postural Stability, Gait Variability, and Gaze Patterns of Children with ASD	RecPlex, 9:00 AM-10:30 AM
Smore, Lindsay E (EHA)	Project READ and Reading with Angels	RecPlex, 11:00 AM-12:30 PM
Snow, Nyssa L (CLP)	The Psycho-Ecological Systems Model for Engaged Scholarship and Service Learning: Theory, Research, and Practice.	LTC - Team Space, 2:00 PM-3:00 PM
Snow, Nyssa L (CLP)	The Effect of Thin-Ideal Media on Body Image: An Experiment Using the Solomon Four-Group Design	RecPlex, 9:00 AM-10:30 AM
Sollmann, Leslie A (MEE)	Bleed Hole Location, Sizing, and Configuration for Use in Hypersonic Inlets	RecPlex, 9:00 AM-10:30 AM
Sousounis, Konstantinos (BIO)	Regulating Proliferation and Differentiation of Notophthalmus viridescens' Immortal Cells in vivo	RecPlex, 9:00 AM-10:30 AM
Speicher, Kyle D (MIS, LDR)	Goodrich Test Lab System	Miriam Hall - 207, 1:00 PM-1:15 PM
Speicher, Kyle D (MIS, LDR)	Communication Tactics in Information Technology	RecPlex, 11:00 AM-12:30 PM
Spirk, Emily C (ECE)	Developing Each Child Academically: Applying Marianist Ideals	RecPlex, 11:00 AM-12:30 PM
Spittler, Anna C (EYA)	Design Science | Science Design: Design Proposal for a Geology Department Mini-Museum	Science Center Auditorium, 3:00 PM-4:00 PM
Spohn, Abigail M (MEE)	Distinctive Engineering Students Stemming from UD	KU - 222, 4:20 PM-4:40 PM
Spohn, Abigail M (MEE)	Drinking for Change: Dayton Aquifer, Bottled Water, Student Choices and Your Ideas	KU - East Ballroom, 2:00 PM-3:00 PM
Squier, Conor W (EYA)	Syntheses of Research on Factors Related to p - 12 Student Achievement	RecPlex, 11:00 AM-12:30 PM
Staker, Katrina L (CME)	Study of developmental interaction of chip and L during DV patterning of Drosophila eye	RecPlex, 9:00 AM-10:30 AM
Stanbery, Erik D (UBU)	Guiding Little Angels: A Literacy Experience at Holy Angels Elementary School	RecPlex, 11:00 AM-12:30 PM
Stayton, Laura E (CLP)	The Psycho-Ecological Systems Model for Engaged Scholarship and Service Learning: Theory, Research, and Practice.	LTC - Team Space, 2:00 PM-3:00 PM
Stayton, Laura E (CLP)	Understanding Posttraumatic Stress Disorder among Victims of Intimate Partner Violence: The Roles of Perceived Social Support, Self-esteem, and Self-blame	RecPlex, 9:00 AM-10:30 AM
Steel, Anne L (CLP)	The Psycho-Ecological Systems Model for Engaged Scholarship and Service Learning: Theory, Research, and Practice.	LTC - Team Space, 2:00 PM-3:00 PM
Steel, Anne L (CLP)	Understanding Posttraumatic Stress Disorder among Victims of Intimate Partner Violence: The Roles of Perceived Social Support, Self-esteem, and Self-blame	RecPlex, 9:00 AM-10:30 AM

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NAME	TITLE	LOCATION/TIME
Tomek, Shannon M (CEE)	Department of Civil and Environmental Engineering and Engineering Mechanics Senior Capstone Presentation: Miami Valley Pointe	KU Boll Theatre, 9:00 AM-12:00 PM
Trapp, Halle S (ENG)	The Empathetic Experience of Beauty	RecPlex, 9:00 AM-10:30 AM
Trentman, Travis D (ACC, OPS)	OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 3 of 3	Miriam Hall - 104, 2:20 PM-3:20 PM
Trifiletti, Anthony M (MUP)	Honors Recital Audition	Sears Recital Hall, 1:00 PM-3:00 PM
Tsiribas, Dimitrios G (ENT, FIN)	Results of operation from two micro-companies of the Sophomore Entrepreneurial Experience Course	Miriam Hall - 109, 3:40 PM-4:40 PM
Tsuleff, Samantha L (REL)	A Catholic Response to Refugee Resettlement: A Case Study of Catholic Social Services in Dayton, OH	KU - 312, 1:00 PM-1:20 PM
Ulintz, Alexander J (GER)	Human Trafficking: An Explanation of Child Soldiers	RecPlex, 11:00 AM-12:30 PM
Untener, Mary A (CME)	The Effect of Dinitrophenol on Electricity Production by a Microbial Fuel Cell	RecPlex, 9:00 AM-10:30 AM
Vanderslice, William D (GEO)	Project READ and Reading with Angels	RecPlex, 11:00 AM-12:30 PM
Vannoy, Bethany L (ECE)	Syntheses of Research on Inclusion and Students with Disabilities	RecPlex, 11:00 AM-12:30 PM
Varricchio, Allison M (POL)	Making Money and Making a Difference in Malawi, Africa.	KU - 312, 1:00 PM-1:20 PM
Varricchio, Allison M (POL)	Understanding Darfur	LTC - Forum, 11:00 AM-12:00 PM
Vellky, Jordan E (BIO)	The bab Locus Model for Synergistic Gene Regulatory Interactions in Development and Evolution	RecPlex, 9:00 AM-10:30 AM
Velotta, April L (SOC)	Human Trafficking: An Explanation of Involuntary Domestic Servitude	RecPlex, 11:00 AM-12:30 PM
Velotta, April L (SOC)	A Culture Forgotten: The Truth about Irish Travellers.	St. Joe's - 13, 1:00 PM-2:00 PM
Venanzi, Travis R (MEE)	Enhancing Adolescent Development through Service Learning	RecPlex, 11:00 AM-12:30 PM
Verghese, Shilpi (BIO)	Hippo signaling controls Dronc activity to regulate organ size in Drosophila.	RecPlex, 9:00 AM-10:30 AM
Verghese, Shilpi (BIO)	A model to study the influence of Hippo signaling on local cell-cell interactions.	RecPlex, 9:00 AM-10:30 AM
Verghese, Shilpi (BIO)	Using Drosophila eye mutants to model defects in Microphthalmia or Anophthalmia	RecPlex, 9:00 AM-10:30 AM
Verghese, Shilpi (BIO)	Functional and Genetic Analysis of Compensatory Responses Induced in Tumors Caused by Loss of Scribble (apical-basal polarity).	RecPlex, 9:00 AM-10:30 AM
Verse, Soleil A (ENG)	Perspectives on American & Ojibwe Writer Louise Erdrich: stories, cultures, identities	KU - 310, 3:30 PM-5:00 PM
Veselik, Michael J (POL, HRS)	Dayton Civic Scholars Senior Capstone Project	LTC - Studio, 3:00 PM-4:00 PM
Veselik, Michael J (POL, HRS)	Human Rights in U.S. Foreign Policy	Marianist Hall Learning Space - 206, 2:00 PM-3:00 PM
Vickers, Walter B (UET)	Ethnographies of Non-profit Organizations Confronting Food Insecurity	ArtStreet - Studio B, 2:00 PM-4:30 PM
Viertel, Mary H (FIN, ACC)	Identifying Portfolio Investment Strategies for High Quality Ranked Stocks in the Highly Volatile Market Period 2008-2011	RecPlex, 9:00 AM-10:30 AM
VonDrasek, Lisa C (LDR)	Teaching and Learning to Make a Difference	RecPlex, 11:00 AM-12:30 PM
Wade, Alexander A (EYA)	Syntheses of Research on Technology and Schools	RecPlex, 11:00 AM-12:30 PM
Waggoner, Eliza K (ENG)	America Singing Loud: Shifting Representations of American National Identity in Allen Ginsberg and Walt Whitman	KU - 311, 4:20 PM-4:40 PM
Waghmare, Indrayani (BIO)	A model to study the influence of Hippo signaling on local cell-cell interactions.	RecPlex, 9:00 AM-10:30 AM
Wagner, Samuel D (CMM)	The Many Different Faces of Modern Day Slavery	KU - 310, 2:00 PM-3:20 PM
Wakefield, Matthew J (ECO)	How Markets and Organizations Fail: Exploring Illusions of Harmony, Predictability, Stability and Rationality	Miriam Hall -103, 8:00 AM-1:00 PM
Walker, William J (FIN, ENT)	The SOE-SBA Entrepreneurship Collaboration: High-tech innovation projects and insights from B-School students on their experiences	Miriam Hall - 109, 2:20 PM-3:20 PM
Walsh, Kara E (EMS)	Topics in Contemporary Modern Africa	KU - 331, 1:00 PM-3:00 PM
Wang, Chenjia (BIO)	Ethnographies of Non-profit Organizations Confronting Food Insecurity	ArtStreet - Studio B, 2:00 PM-4:30 PM
Wang, Shiyuan (UNDEF)	Ethnographies of Non-profit Organizations Confronting Food Insecurity	ArtStreet - Studio B, 2:00 PM-4:30 PM
Wang, Shu (ELE)	Optimum Microarchitectures for Neuromorphic Algorithms	RecPlex, 9:00 AM-10:30 AM
Wang, Yexun (BIE)	ISOLATION AND CHARACTERIZATION OF WASTEWATER PHAGE	RecPlex, 9:00 AM-10:30 AM
Wang, Yu (EOP)	Novel wiregrid micropolorizers for visible wavelength polarimetry	KU - 211, 1:40 PM-2:00 PM
Ward, Brendan P (CEE)	Department of Civil and Environmental Engineering and Engineering Mechanics Senior Capstone Presentation: Miami Valley Pointe	KU Boll Theatre, 9:00 AM-12:00 PM
Ward, Hayley E (BCM)	Inhibition of the PriA and PriB Primosome Proteins of the Neisseria gonorrhoeae Replication Restart Pathway.	RecPlex, 9:00 AM-10:30 AM
Wargacki, Lauren M (CJS)	How are Juvenile Sex Offenders Perceived by College Students?	St. Joe's - 25, 11:00 AM-12:00 PM
Warshaw, Robin L (ENG)	Perspectives on American & Ojibwe Writer Louise Erdrich: stories, cultures, identities	KU - 310, 3:30 PM-5:00 PM
Washington, Courtney (HOA)	Baroque Architecture and the Building of Bernini's Baldacchino.	KU - West Ballroom, 3:40 PM-4:00 PM
Wedel, Sarah M (ESM)	History of Social Media and how they track it success	LTC - Team Space, 1:00 PM-1:20 PM
Wedell, Ann L (CME)	Creating the RecBikes Program and Imagining the Future of Biking at U.D.	KU - 310, 1:00 PM-2:00 PM
Weeman, Elizabeth M (MIS)	T & T Graphics Customer Ordering System	Miriam Hall - 207, 1:45 PM-2:00 PM
Wehner, William D (CEE)	Department of Civil and Environmental Engineering and Engineering Mechanics Senior Capstone Presentation: Miami Valley Pointe	KU Boll Theatre, 9:00 AM-12:00 PM
Wehner, William D (CEE)	Model Home Project	RecPlex, 11:00 AM-12:30 PM
Weigand, Richard T (EMS)	Topics in Contemporary Modern Africa	KU - 331, 1:00 PM-3:00 PM
Weisenborn, Kelly A (EMS)	Creating the RecBikes Program and Imagining the Future of Biking at U.D.	KU - 310, 1:00 PM-2:00 PM
Weiskittel, Kilee A (CMM, PSY)	Illuminating the Issue of Literacy	RecPlex, 11:00 AM-12:30 PM
Welch, Rebecca E (MUT, PSY)	Honors Recital Audition	Sears Recital Hall, 1:00 PM-3:00 PM
Westerheide, Douglas E (CEE)	Department of Civil and Environmental Engineering and Engineering Mechanics Senior Capstone Presentation: Miami Valley Pointe	KU Boll Theatre, 9:00 AM-12:00 PM

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NAME	TITLE	LOCATION/TIME
Ahoujja, Mohamed	Measuring Alpha-particle Charge to Mass Ratio using a Cloud Chamber	RecPlex, 11:00 AM-12:30 PM
Altman, Aaron	Bleed Hole Location, Sizing, and Configuration for Use in Hypersonic Inlets	RecPlex, 9:00 AM-10:30 AM
Amin, Julius A	Topics in Contemporary Modern Africa	KU - 331, 1:00 PM-3:00 PM
Amin, Julius A	Eamon de Valera and the Rise of Fianna Fail	RecPlex, 11:00 AM-12:30 PM
Anderson, Amy E	The International Student Experience Assessment Project	RecPlex, 9:00 AM-10:30 AM
Apolito, Timothy F	Correcting Corrections-Based Programs in Juvenile Detention Centers	St. Joe's - 25, 11:00 AM-12:00 PM
Apolito, Timothy F	Concealed on Campus: Should students and faculty with a concealed carry permit be allowed to carry firearms on Ohio college campuses?	St. Joe's - 25, 2:00 PM-3:00 PM
Archer, Matthew D	Enhancing Adolescent Development through Service Learning	RecPlex, 11:00 AM-12:30 PM
Archer, Matthew D	The Difference We Make is in the Doing	RecPlex, 11:00 AM-12:30 PM
Archer, Matthew D	Guiding Little Angels: A Literacy Experience at Holy Angels Elementary School	RecPlex, 11:00 AM-12:30 PM
Archer, Matthew D	Finding Inner and Outer Peace	RecPlex, 11:00 AM-12:30 PM
Archer, Matthew D	Illuminating the Issue of Literacy	RecPlex, 11:00 AM-12:30 PM
Archer, Matthew D	Service Learning: Giving Back to the Community While Learning	RecPlex, 11:00 AM-12:30 PM
Archer, Matthew D	Learning as a Way of Leading	RecPlex, 11:00 AM-12:30 PM
Archer, Matthew D	Project READ and Reading with Angels	RecPlex, 11:00 AM-12:30 PM
Archer, Matthew D	Developing Each Child Academically: Applying Marianist Ideals	RecPlex, 11:00 AM-12:30 PM
Archer, Matthew D	It Takes a Community to Ensure Equality	RecPlex, 11:00 AM-12:30 PM
Archer, Matthew D	Helping Angels Find Their Wings	RecPlex, 11:00 AM-12:30 PM
Archer, Matthew D	Leadership and Service: A Social Justice Approach	RecPlex, 11:00 AM-12:30 PM
Archer, Matthew D	From UD to DECA	RecPlex, 11:00 AM-12:30 PM
Archer, Matthew D	Working Together for a Greater Tomorrow	RecPlex, 11:00 AM-12:30 PM
Archer, Matthew D	Flying with Angels	RecPlex, 11:00 AM-12:30 PM
Archer, Matthew D	Discovering Peace in Dayton	RecPlex, 11:00 AM-12:30 PM
Archer, Matthew D	Teaching and Learning to Make a Difference	RecPlex, 11:00 AM-12:30 PM
Asari, Vijayan K	A Fast and Adaptive Technique for Hazy/Foggy Image Enhancement	KU - 311, 3:40 PM-4:00 PM
Asari, Vijayan K	Phase Space Analysis to Detect and Remove Rain from Video	RecPlex, 9:00 AM-10:30 AM
Baer, Janine T	The Uses and Benefits of TRX Training	RecPlex, 11:00 AM-12:30 PM
Baer, Janine T	Sugar, Sugar: How Much Sweetness Do You Really Need	RecPlex, 9:00 AM-10:30 AM
Banerjee, Partha P	Transfer Matrix Approach to Propagation of Angular Plane Wave Spectra Through Metamaterial Multilayer Structures	RecPlex, 9:00 AM-10:30 AM
Barker, Rachel E	Re-establishing Native Flora in a Streamside Forest after Removal of the Invasive Shrub Amur Honeysuckle (Lonicera maackii)	RecPlex, 9:00 AM-10:30 AM
Barrios, Joaquin A	Varus Knee Alignment and Gait in Healthy College-Aged Females	KU - 211, 4:20 PM-4:40 PM
Barrios, Joaquin A	The Influence of Specific Gait Modifications on Medial Knee Loading and Metabolic Cost	KU - 331, 3:00 PM-3:20 PM
Becker, Paul J	DARE to Question Our Countries Juvenile Drug Programs	St. Joe's - 25, 3:00 PM-4:00 PM
Bedi, Shimpi	Hippo signaling controls Dronc activity to regulate organ size in Drosophila	RecPlex, 9:00 AM-10:30 AM
Benbow, Mark E	Blow Fly Oviposition Dynamics on Liver Bait and Swine Carcasses Exposed at Dusk	KU - 211, 2:00 PM-2:20 PM
Benbow, Mark E	Comparative Bioassesment of Tropical Watersheds Relative to Habitat Degradation in the Republic of Palau	KU - 211, 2:20 PM-2:40 PM
Benbow, Mark E	Hydroperiod Influence on Bacterial Communities Assessed by Way of Metabolic Profiling	KU - 211, 2:40 PM-3:00 PM
Benbow, Mark E	Response of Invertebrate Grazers to the Influence of Abiotic Factors on Epilithic Biofilm Development	KU - 211, 3:00 PM-3:20 PM
Benbow, Mark E	Forensically Important Insect and Metabolic Community Differentials via Vertebrate Scavenging	KU - 211, 3:20 PM-3:40 PM
Benbow, Mark E	Riparian Forest Invasion by a Terrestrial Shrub (Lonicera maackii) Impacts Aquatic Organic Matter Processing and Biota in Headwater Streams	KU - 312, 2:20 PM-2:40 PM
Benbow, Mark E	Influence of Abiotic Factors on Biofilm Succession in the Little Miami River	RecPlex, 9:00 AM-10:30 AM
Benbow, Mark E	Scavenging Effects on Carrion Decomposition (SSI: Swine Scene Investigation)	RecPlex, 9:00 AM-10:30 AM
Benbow, Mark E	Influences of Disturbance Factors on Epilithic Biofilm Succession Throughout the Autumn Season: Stream Flow and Organic Matter Pulse Dynamics	RecPlex, 9:00 AM-10:30 AM
Benin, Vladimir A	Structural Studies and Coupling Reactions of Boronic Esters and Amides	RecPlex, 9:00 AM-10:30 AM
Berney, Rex L	Measuring Alpha-particle Charge to Mass Ratio using a Cloud Chamber	RecPlex, 11:00 AM-12:30 PM
Bigelow, Kimberly E	A Pilot Study of the Effect of an Acute Vestibular Therapy on Postural Stability, Gait Variability, and Gaze Patterns of Children with ASD	RecPlex, 9:00 AM-10:30 AM
Bigelow, Kimberly E	The Effect of Different Foams on Posturography Measures in Healthy and Impaired Populations	RecPlex, 9:00 AM-10:30 AM
Bigelow, Kimberly E	Rehabilitation Engineering: Design of a Shower Transfer Seat	RecPlex, 9:00 AM-10:30 AM
Bigelow, Kimberly E	The Effect on Postural Sway of Transitions from Non-Compliant to Compliant Flooring	RecPlex, 9:00 AM-10:30 AM
Borbonus, Dorian	Slavery through the Ages; An Historical Narrative on Bondage and Ideology and the Institution of Slavery Today	KU - 311, 1:00 PM-1:20 PM
Borbonus, Dorian	Ancient History and Modern Ideology	KU - West Ballroom, 2:00 PM-3:00 PM
Browning, Charles E	Thermal Transport Across Watre-Graphite Interfaces	RecPlex, 9:00 AM-10:30 AM
Budabin, Alexandra	We Remember... the Holocaust and Other Genocides	KU - Torch Lounge, 1:30 PM-3:30 PM
Budabin, Alexandra	Understanding Darfur	LTC - Forum, 11:00 AM-12:00 PM
Budabin, Alexandra	Politics of Genocide: Current Research	LTC - Studio, 4:00 PM-5:00 PM

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NAME	TITLE	LOCATION/TIME
Burky, Albert J	Importance of Filter Feeding Organisms for Water Quality	RecPlex, 11:00 AM-12:30 PM
Busch, Arthur H	10th Annual Integration Bee	Science Center - 255 (Chudd), 1:00 PM-3:00 PM
Busch, Arthur H	Integration Bee Lunch	Science Center - Atrium, 12:00 PM-1:00 PM
Caporale, Tony S	Same Old (New) Deal? Examining the Determinates of ARRA Spending	RecPlex, 9:00 AM-10:30 AM
Caporale, Tony S	Minor League Baseball from 1998-2011: Tradition, Success and the Recession	RecPlex, 9:00 AM-10:30 AM
Carlson, Marybeth	The Gaelic Revival: Preservation of Irish Culture and Catalyst for Revolutionary Nationalism	Marianist Hall Learning Space - 218, 1:00 PM-1:30 PM
Carlson, Marybeth	Obstacles to Modernization in Ireland	Marianist Hall Learning Space - 218, 1:30 PM-2:00 PM
Carlson, Marybeth	The Effects of the Potato Famine in the 19th Century and Today	Marianist Hall Learning Space - 218, 2:00 PM-3:00 PM
Carlson, Marybeth	Nationalist Political Violence in Ireland: The Land League, the Easter Rising, and the Public Safety Act of 1923	Marianist Hall Learning Space - 218, 3:00 PM-4:00 PM
Carrillo, Albino	America Singing Loud: Shifting Representations of American National Identity in Allen Ginsberg and Walt Whitman	KU - 311, 4:20 PM-4:40 PM
Carter, Michael S	The French Revolution in Early American Historical Imagination	RecPlex, 9:00 AM-10:30 AM
Cassiman, Shawn A	A Catholic Response to Refugee Resettlement: A Case Study of Catholic Social Services in Dayton, OH	KU - 312, 1:00 PM-1:20 PM
Cassiman, Shawn A	Managing Emotions and Coping Strategies within Pregnancy Help Centers	St. Joe's - 13, 3:00 PM-4:00 PM
Chase, Donald V	Department of Civil and Environmental Engineering and Engineering Mechanics Senior Capstone Presentation: Miami Valley Pointe	KU Boll Theatre, 9:00 AM-12:00 PM
Chelle, Robert F	Results of operation from two micro-companies of the Sophomore Entrepreneurial Experience Course	Miriam Hall - 109, 3:40 PM-4:40 PM
Chen, Rong-Chin C	Idiosyncratic Risks in Different Regimes and The Cross-section of Expected Stock Returns	RecPlex, 9:00 AM-10:30 AM
Chenoweth, Richard K	The Hindemith Sonata for Four Horns: A Lecture Recital	Sears Recital Hall, 3:30 PM-4:30 PM
Ciric, Amy R	Appropriate Technology for Extraction of Essential Oils from Orange Peels in La Paz, Bolivia	RecPlex, 9:00 AM-10:30 AM
Clarke, John V	Design Science | Science Design: Design Proposal for a Geology Department Mini-Museum	Science Center Auditorium, 3:00 PM-4:00 PM
Cofield, Maceo E	Thermal Transport Across Watre-Graphite Interfaces	RecPlex, 9:00 AM-10:30 AM
Comfort, Donald A	Engineering Therapeutic VNP Formulations for Applications in Cancer Therapy	KU - 211, 1:00 PM-1:20 PM
Comfort, Donald A	Engineering Therapeutic VNP Formulations for Applications in Cancer Therapy	KU - 211, 1:20 PM-1:40 PM
Comfort, Donald A	The Effect of Dinitrophenol on Electricity Production by a Microbial Fuel Cell	RecPlex, 9:00 AM-10:30 AM
Comfort, Donald A	Electricity Generation using Sulfolobus solfataricus in a High-Temperature Microbial Fuel Cell	RecPlex, 9:00 AM-10:30 AM
Courte, Dale E	Applying Genetic Programming to Develop a Rubik's Cube Solver	RecPlex, 9:00 AM-10:30 AM
Crosson, Garry	Sorption Kinetics of Denatonium Benzoate to 2:1 Layered Aluminosilicates	RecPlex, 9:00 AM-10:30 AM
Crum, Roger J	Between Image and Imagination: American Landscapes from the Dicke Collection	KU - 222, 1:40 PM-2:00 PM
Crum, Roger J	The Classical Influence: The Design of American University Campuses, the University of Dayton, and the Ideals of American Society	KU - 222, 2:00 PM-2:20 PM
Currell, Cynthia C	The Forgotten Families? An in-depth Exploration of the Perceptions of Public Child Welfare Employees on the Effects of Parental Incarceration on Families	St. Joe's - 25, 1:00 PM-2:00 PM
Currell, Cynthia C	Prison Rehab: The Road to Sobriety or Recidivism?	St. Joe's - 25, 1:00 PM-2:00 PM
Daniels, Malcolm W	Model Home Project	RecPlex, 11:00 AM-12:30 PM
Daniels, Malcolm W	Appropriate Technology for Extraction of Essential Oils from Orange Peels in La Paz, Bolivia	RecPlex, 9:00 AM-10:30 AM
Darrow, David W	Vocation: Creating a Masterpiece	Alumni Hall - 101, 1:00 PM-2:00 PM
Dasgupta, Simanti	Dayton Public School: An Ethnographic look at the Socio-economic Culture	KU - 222, 4:00 PM-4:20 PM
Dasgupta, Simanti	Ethnographical Perspectives and Volunteering at Dayton Public Schools	LTC - Forum, 1:40 PM-2:00 PM
Dasgupta, Simanti	Structural Functionalism in Schools	LTC - Forum, 2:00 PM-2:20 PM
Dasgupta, Simanti	Banning the Burqa: France and the specter of Colonialism	RecPlex, 9:00 AM-10:30 AM
Dasgupta, Simanti	Fitting In: Body Image within Sorority life at the University of Dayton.	St. Joe's - 13, 1:00 PM-2:00 PM
Davies, Susan C	The International Student Experience Assessment Project	RecPlex, 9:00 AM-10:30 AM
Davis, Susan T	The Relationship between Narcissism, Overconfidence and Risky Behavior	RecPlex, 9:00 AM-10:30 AM
Davis, Susan T	Multimodal Evaluation of Resource Allocation in a Comprehension Task	RecPlex, 9:00 AM-10:30 AM
Davis, Susan T	Evaluations of Aesthetics of Faces in Portraits and Photographs	RecPlex, 9:00 AM-10:30 AM
Davis, Susan T	Measuring Spatial Intelligence and Memory for Location in Athletes	RecPlex, 9:00 AM-10:30 AM
Davis, Susan T	The Use of A Mental Rotation Task to Assess Narcissism and Gender Biases	RecPlex, 9:00 AM-10:30 AM
Davis, Susan T	Performance and Assessment of Accuracy in a Visual Sustained Attention Task	RecPlex, 9:00 AM-10:30 AM
Davis-Berman, Jennifer	The Providers: Relationships with Alzheimer's Patients	St. Joe's - 13, 3:00 PM-4:00 PM
Davis-Berman, Jennifer	The Mental Crisis: The use of CIT training for college law enforcement agencies	St. Joe's - 25, 2:00 PM-3:00 PM
Dean, Robert D	The U.S. Economic Outlook for 2012 and Flyer Fund Sector Weights	Miriam Hall - 118 (Davis Center), 1:00 PM-2:00 PM
Dean, Robert D	Buy, Sell or Hold: An In-Depth Look at the Flyer Fund Security Selection Process	Miriam Hall - 118 (Davis Center), 11:00 AM-12:00 PM
Dean, Robert D	ROA and ROE as Determinants of Quality in Portfolio Management	Miriam Hall - 213, 2:20 PM-2:40 PM
Dean, Robert D	Do Dividends Matter: An empirical analysis of the impact of dividends on portfolio stock selection, portfolio weights, and portfolio returns for S&P 500 stocks over the period 2005-2010	Miriam Hall - 213, 2:40 PM-3:00 PM
Dean, Robert D	S&P Valuation Modeling: An Empirical Analysis 1999-2011	RecPlex, 11:00 AM-12:30 PM
Dean, Robert D	An analysis of idiosyncratic risk and flyer fund performance in thr highly volatile market period 2007-2011	RecPlex, 9:00 AM-10:30 AM
Dean, Robert D	Idiosyncratic Risk, Beta and S&P 500 Sector Performance in The Market Period 2005-2011	RecPlex, 9:00 AM-10:30 AM
Dean, Robert D	Non Domestic Revenue Trends and Stock Performance for Flyer Fund Stocks 2005-2011	RecPlex, 9:00 AM-10:30 AM

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Dean, Robert D	An Analysis of Excess Stock Returns and Fat Tail Distributions for Flyer Fund Stocks in the Volatile Market Period of 2007 - 2011	RecPlex, 9:00 AM-10:30 AM
Dean, Robert D	An Analysis of Risk Adjusted Returns for Flyer Fund Stocks Over the Period 2007-2011	RecPlex, 9:00 AM-10:30 AM
Dean, Robert D	Identifying Portfolio Investment Strategies for High Quality Ranked Stocks in the Highly Volatile Market Period 2008-2011	RecPlex, 9:00 AM-10:30 AM
Dean, Robert D	An Analysis of the Returns to High Quality Mega Cap Stocks in Volatile Markets: 2008-2011 as a Case Study	RecPlex, 9:00 AM-10:30 AM
Dean, Robert D	Identifying upside and downside performance potential for Flyer Fund Stocks in the high volatile market period, 2007-2011.	RecPlex, 9:00 AM-10:30 AM
Dean, Robert D	Upside/Downside Capture Ratios and S&P 500 Sector Returns in Volatile Markets	RecPlex, 9:00 AM-10:30 AM
Dean, Robert D	Macro Economic Trends And S&P 500 Sector Returns 2002-2011	RecPlex, 9:00 AM-10:30 AM
Dean, Robert D	A Linear Probability Model of the Likelihood of Positive Returns for the S&P 500 Sectors, 2005-2001	RecPlex, 9:00 AM-10:30 AM
Dean, Robert D	ROA and ROE as Determinants of Quality in Portfolio Management	RecPlex, 9:00 AM-10:30 AM
Dean, Robert D	Do Dividends Matter: An empirical analysis of the impact of dividends on portfolio stock selection, portfolio weights, and portfolio returns for S&P 500 stocks over the period 2005-2010	
DeMarco, George M	A Symbolic Interactive Analysis of Pre-Medical Students Field Experience in Orthopedic Surgery and Athletic Training	RecPlex, 11:00 AM-12:30 PM
DeMarco, George M	The Effectiveness of a Personalized Peer Physical Education Program (PPPEP) on the Health Related Physical Fitness and Diets of Selected College Age Students	RecPlex, 11:00 AM-12:30 PM
DeMarco, George M	The History of Physical Education-Activity and Sport: Stories for the Ages and Lessons from the Legends of Memorable Moments, Events, Trends, Tales, ... Phenomena, and Famous Women and Men: Their Teams and Times - Semester VI	RecPlex, 11:00 AM-12:30 PM
Dickey, Irene J	The P&G Marketing Challenge	Miriam Hall - 214, 2:20 PM-3:20 PM
Dixon, Lee J	The Mediating Effects of Rumination on the Relationship between Perfectionism and Self-forgiveness	RecPlex, 9:00 AM-10:30 AM
Dixon, Lee J	Anxious Attachment, Silencing the Self, and Relationship Satisfaction	RecPlex, 9:00 AM-10:30 AM
Doench, Meredith L	Enhancing Adolescent Development through Service Learning	RecPlex, 11:00 AM-12:30 PM
Doench, Meredith L	The Difference We Make is in the Doing	RecPlex, 11:00 AM-12:30 PM
Doench, Meredith L	Immigration and Refugee Plunge: A Social Justice Learning Living Cohort Community Project	RecPlex, 11:00 AM-12:30 PM
Doench, Meredith L	Guiding Little Angels: A Literacy Experience at Holy Angels Elementary School	RecPlex, 11:00 AM-12:30 PM
Doench, Meredith L	Finding Inner and Outer Peace	RecPlex, 11:00 AM-12:30 PM
Doench, Meredith L	Illuminating the Issue of Literacy	RecPlex, 11:00 AM-12:30 PM
Doench, Meredith L	Service Learning: Giving Back to the Community While Learning	RecPlex, 11:00 AM-12:30 PM
Doench, Meredith L	Learning as a Way of Leading	RecPlex, 11:00 AM-12:30 PM
Doench, Meredith L	Project READ and Reading with Angels	RecPlex, 11:00 AM-12:30 PM
Doench, Meredith L	Developing Each Child Academically: Applying Marianist Ideals	RecPlex, 11:00 AM-12:30 PM
Doench, Meredith L	It Takes a Community to Ensure Equality	RecPlex, 11:00 AM-12:30 PM
Doench, Meredith L	Helping Angels Find Their Wings	RecPlex, 11:00 AM-12:30 PM
Doench, Meredith L	Leadership and Service: A Social Justice Approach	RecPlex, 11:00 AM-12:30 PM
Doench, Meredith L	From UD to DECA	RecPlex, 11:00 AM-12:30 PM
Doench, Meredith L	Working Together for a Greater Tomorrow	RecPlex, 11:00 AM-12:30 PM
Doench, Meredith L	Flying with Angels	RecPlex, 11:00 AM-12:30 PM
Doench, Meredith L	Discovering Peace in Dayton	RecPlex, 11:00 AM-12:30 PM
Doench, Meredith L	Teaching and Learning to Make a Difference	RecPlex, 11:00 AM-12:30 PM
Driskell, Shannon Olivia S	Case Studies: The Experiences of Gifted Females in Mathematics	RecPlex, 9:00 AM-10:30 AM
Elhamri, Said	Epitaxial Graphene on SiC	RecPlex, 9:00 AM-10:30 AM
Eloe, Paul W	Numerical Algorithm to Value American Call Option	RecPlex, 9:00 AM-10:30 AM
Eloe, Paul W	A Synthesis of finite difference methods and the jump process arising in the pricing of Contingent Claim	RecPlex, 9:00 AM-10:30 AM
Eloe, Paul W	Option pricing based on Regime-Switching Recombining Tree	RecPlex, 9:00 AM-10:30 AM
Elsass, Michael J	Artificial Neural Networks and Their Use in Process Monitoring and Diagnosis of an Industrial Injection Molding Process	RecPlex, 9:00 AM-10:30 AM
Enns, Harvey G	Goodrich Test Lab System	Miriam Hall - 207, 1:00 PM-1:15 PM
Enns, Harvey G	itelligence Project Management System	Miriam Hall - 207, 1:15 PM-1:30 PM
Enns, Harvey G	ISUS Social Media System	Miriam Hall - 207, 1:30 PM-1:45 PM
Enns, Harvey G	T & T Graphics Customer Ordering System	Miriam Hall - 207, 1:45 PM-2:00 PM
Enns, Harvey G	Goodrich Customer Information System	Miriam Hall - 207, 2:20 PM-2:40 PM
Enns, Harvey G	Superior Abrasives Enterprise Resource Planning System	Miriam Hall - 207, 2:40 PM-3:00 PM
Enns, Harvey G	PHP Service Catalog Project	Miriam Hall - 207, 3:00 PM-3:20 PM
Farrell, Dorie M	How are Juvenile Sex Offenders Perceived by College Students?	St. Joe's - 25, 11:00 AM-12:00 PM
Farrell, Dorie M	The CSI effect: A Study in the Perceptions of Crime	St. Joe's - 25, 3:00 PM-4:00 PM
Farrell, Dorie M	Torture: Perceptions, Ethics, and Reality	St. Joe's - 25, 4:00 PM-4:40 PM
Ferguson, Richard T	Destination Dayton: Dayton Civic Scholar Junior Cohort Capstone Project	KU - 222, 2:20 PM-3:00 PM
Ferguson, Richard T	Creating the RecBikes Program and Imagining the Future of Biking at U.D.	KU - 310, 1:00 PM-2:00 PM
Ferguson, Richard T	Destination Dayton: Dayton Civic Scholar 2013 Cohort Capstone Project	RecPlex, 9:00 AM-10:30 AM
Ferguson, Susan M	Syntheses of Research on Evaluation of p - 12 Teachers	RecPlex, 11:00 AM-12:30 PM
Ferguson, Susan M	Syntheses of Research on Technology and Schools	RecPlex, 11:00 AM-12:30 PM
Ferguson, Susan M	Syntheses of Research on School Curriculum	RecPlex, 11:00 AM-12:30 PM

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Ferguson, Susan M	Syntheses of Research on Factors Related to p - 12 Student Achievement	RecPlex, 11:00 AM-12:30 PM
Ferguson, Susan M	Syntheses of Research on Extracurricular Activities in p - 12 Schools	RecPlex, 11:00 AM-12:30 PM
Ferguson, Susan M	Syntheses of Research on Differences Across Schools and Classrooms	RecPlex, 11:00 AM-12:30 PM
Ferguson, Susan M	Syntheses of Research on Inclusion and Students with Disabilities	RecPlex, 11:00 AM-12:30 PM
Ferguson, Susan M	Syntheses of Research on Gender Segregation in Schools	RecPlex, 11:00 AM-12:30 PM
Ferguson, Susan M	Syntheses of Research on School Policy and the Rights of Individuals	RecPlex, 11:00 AM-12:30 PM
Fleischmann, Ellen L	Navigating the Middle East: Student Field Research in Jordan, Egypt and Morocco	LTC - Forum, 3:00 PM-4:30 PM
Forbis, Jeremy S	Thinking Errors and Cognitive Distortions Among Juveniles	St. Joe's - 25, 11:00 AM-12:00 PM
Forbis, Jeremy S	Pardon Me: An Inquiry Into the Executive Clemency System in Ohio	St. Joe's - 25, 3:00 PM-4:00 PM
Foster, Steven C	A Symbolic Interactive Analysis of Pre-Medical Students Field Experience in Orthopedic Surgery and Athletic Training	RecPlex, 11:00 AM-12:30 PM
Fouke, Daniel C	Adopting a Policy of Sustainable Landscaping on UD's Campus	RecPlex, 11:00 AM-12:30 PM
Ganote, Marvin D	Job Outlooks for Various Occupations Within the Health and Sport Science Field	RecPlex, 11:00 AM-12:30 PM
Ganote, Marvin D	How the Future Looks for Your First Career Job	RecPlex, 11:00 AM-12:30 PM
Ganote, Marvin D	This display is about these career fields projected 10 years into the future: Exercise Physiology, Athletic Training, Occupational Therapy and Physical Therapy	RecPlex, 11:00 AM-12:30 PM
Ganote, Marvin D	Opportunities and Future Career Goals For Our Immediate Career Positions	RecPlex, 11:00 AM-12:30 PM
Ganote, Marvin D	Career Outlook: Future Jobs in Physical Therapy, Occupational Therapy, and Personal Training	RecPlex, 11:00 AM-12:30 PM
Ganote, Marvin D	The Projected Future of Various Careers in the Health Field for the Next 10 Years - Includes Personal Training, Occupational Therapy, Pediatric Physical Therapy, and Orthopedic Physical Therapy	RecPlex, 11:00 AM-12:30 PM
Ganote, Marvin D	Career Opportunities in the Health and Sports Science Department	RecPlex, 11:00 AM-12:30 PM
Ganote, Marvin D	Health and Sports Science Career Paths	RecPlex, 9:00 AM-10:30 AM
Gardstrom, Susan C	Music Therapy and Evolving Sense of Hope Among At-Risk Adolescent Boys: A Qualitative Group Case Study Based on Yalom's Principles of Group Psychotherapy	RecPlex, 9:00 AM-10:30 AM
Goldman, Daniel	Design Science | Science Design: Design Proposal for a Geology Department Mini-Museum	Science Center Auditorium, 3:00 PM-4:00 PM
Goodnight, Jackson A	The Effect of the Parent-Adolescent Emotional Context on the Link between Positive Parenting Practices and Adolescent Behavioral Adjustment	RecPlex, 9:00 AM-10:30 AM
Goodnight, Jackson A	Parental Sensitivity to Child Anxiety Problems: An Examination of Child, Family, and Demographic Influences	RecPlex, 9:00 AM-10:30 AM
Goodnight, Jackson A	The Effects of Social Support on Adjustment to College	RecPlex, 9:00 AM-10:30 AM
Gorman, Michael F	OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 2 of 3	Miriam Hall - 104, 1:00 PM-2:00 PM
Gorman, Michael F	OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 1 of 3	Miriam Hall - 104, 11:00 AM-12:00 PM
Gorman, Michael F	OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 3 of 3	Miriam Hall - 104, 2:20 PM-3:20 PM
Hallinan, Kevin P	Approaches to Achieving Community Energy Reduction: Business Outreach in Rust Belt Cities	KU - 312, 2:00 PM-2:20 PM
Hansen, Douglas C	Controlling the Corrosion of Metals with Polyphenolic Proteins	RecPlex, 9:00 AM-10:30 AM
Hansen, Karolyn M	The role of diet and sex in the gustatory behavioral responses of the blow fly, Lucilia sericata (Diptera: Calliphoridae), to decomposition-related amino acids	KU - 312, 4:00 PM-4:20 PM
Hansen, Karolyn M	Tapered Optical Fibers for Detection of Volatile Organic Compounds	RecPlex, 9:00 AM-10:30 AM
Hansen, Karolyn M	Effects of Dietary Regimen on Lifespan and Fecundity of Blow Fly, Lucilia sericata (Diptera: Calliphoridae)	RecPlex, 9:00 AM-10:30 AM
Hansen, Karolyn M	The Role of Hemocytes in Shell Formation in the Eastern Oyster, Crassostrea virginica	RecPlex, 9:00 AM-10:30 AM
Haritashya, Umesh K	Overview of glacier velocity across Himalaya	RecPlex, 9:00 AM-10:30 AM
Hart, Patricia M	English Language Learners	RecPlex, 11:00 AM-12:30 PM
Hart, Patricia M	Social Integration and Implementation in the Classroom	RecPlex, 11:00 AM-12:30 PM
Hart, Patricia M	Communication and Students with Autism	RecPlex, 11:00 AM-12:30 PM
Hart, Patricia M	Defining Giftedness: Explaining Criteria, Models and Impact of Teachers on Gifted Education	RecPlex, 11:00 AM-12:30 PM
Hart, Patricia M	Preventing Bullying: What Can Educators Do?	RecPlex, 11:00 AM-12:30 PM
Hart, Patricia M	Study Abroad for Prospective Teachers	RecPlex, 11:00 AM-12:30 PM
Hart, Patricia M	Improving Teacher Preparation to Enhance Academic Achievement of English Language Learners	RecPlex, 11:00 AM-12:30 PM
Hart, Patricia M	Teaching Strategies, Methods, and Procedures for English Language Learners in Early Childhood Education	RecPlex, 11:00 AM-12:30 PM
Hart, Patricia M	Effective Instructional Strategies For Use with Upper-Grade Level Struggling Readers	RecPlex, 11:00 AM-12:30 PM
Hart, Patricia M	The Impact of Racial, Ethnic, and Socioeconomic Differences on Autism Identification and Treatment	RecPlex, 11:00 AM-12:30 PM
Hart, Patricia M	Highly Effective Teaching Strategies That Impact Low Achieving Mathematics Classrooms	RecPlex, 11:00 AM-12:30 PM
Hart, Patricia M	Review of Relevant Literature: Developing Social Consciousness through Young Adult Literature	RecPlex, 11:00 AM-12:30 PM
Hart, Patricia M	Efficiency, Adequacy, and Equity in Educational Funding: A Review of the Literature	RecPlex, 9:00 AM-10:30 AM
Hart, Patricia M	Responding to Challenging Behaviors in a Preschool Setting	RecPlex, 9:00 AM-10:30 AM
Hartley, Linda A	An Investigation of Contemporary Assessment in Music Education	KU - 311, 2:40 PM-3:00 PM
Hartley, Linda A	Edison After School Music Program: A Field Experience Volunteering With Inner City Youth	RecPlex, 9:00 AM-10:30 AM
Hartley, Linda A	Assessing Growth of Grades Six Through Eight Ohio Music Students and the Effectiveness of their Teachers	RecPlex, 9:00 AM-10:30 AM
Haus, Joseph W	Metal Nanorod Structures: Electromagnetic and quantum confinement properties	RecPlex, 9:00 AM-10:30 AM
Herrelko, David A	The Transformation of The Wheels for Kids Organization from a First Year Engineering Design Project to a Year-Long Service Learning Project	RecPlex, 9:00 AM-10:30 AM
Hirakawa, Keigo	Corrupted Reference Image Quality Assessment	KU - 312, 1:40 PM-2:00 PM

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Hirakawa, Keigo	Analysis of Motion Blur Using Double Discrete Wavelet Transform	RecPlex, 9:00 AM-10:30 AM
Holcomb, Jeanne A	A Culture Forgotten: The Truth about Irish Travellers	St. Joe's - 13, 1:00 PM-2:00 PM
Holcomb, Jeanne A	Transracial Adoption: How White Parents Help Children of Color Form Their Racial and Cultural Identity	St. Joe's - 13, 2:00 PM-3:00 PM
Holcomb, Jeanne A	Communication Devices in the Family: Family Satisfaction in a Hand-Held Technological World	St. Joe's - 13, 4:00 PM-5:00 PM
Hong, Yiling	Reprogramming Fibroblasts into Stem Cell like Cells	KU - 211, 4:00 PM-4:20 PM
Hong, Yiling	Nickel, copper, and zinc centered ruthenium substituted porphyrins: Effect of transition metals on photoinduced DNA cleavage and photoinduced melanoma cell toxicity	KU - 311, 2:20 PM-2:40 PM
Hong, Yiling	Synthesis and Properties of Carbon Microcoils	RecPlex, 9:00 AM-10:30 AM
Hong, Yiling	The Effects of Silver Nanoparticles on Mouse Embryonic Cell Renewal and Cell Cycle	RecPlex, 9:00 AM-10:30 AM
Huacuja, Judith L	Art Consultation: Designing My Art History Career	KU - West Ballroom, 3:00 PM-3:20 PM
Huacuja, Judith L	Struggles in Solitude: An Examination of Francisco Goya's Black Paintings	KU - West Ballroom, 3:20 PM-3:40 PM
Huacuja, Judith L	Baroque Architecture and the Building of Bernini's Baldacchino.	KU - West Ballroom, 3:40 PM-4:00 PM
Huacuja, Judith L	Art of Persuasion: The Decorative Focus of the Vienna Secession	KU - West Ballroom, 4:00 PM-4:20 PM
Huacuja, Judith L	VISION this: THE QUILT AS ART // Heal Thyself: Artistic Exploration, Insight, & Development within Therapeutic Practices	Marianist Hall Learning Space - Commons, 2:00 PM-3:00 PM
Huacuja, Judith L	Uncovering Identity: Portraits of Dayton	RecPlex, 11:00 AM-12:30 PM
Hudson, Natalie F	Addressing Human Rights Abuses in Women's Prisons with a Gender-Responsive Model	LTC - Studio, 1:40 PM-2:00 PM
Hudson, Natalie F	Human Rights in U.S. Foreign Policy	Marianist Hall Learning Space - 206, 2:00 PM-3:00 PM
Hughes, Sheila H	Perspectives on American & Ojibwe Writer Louise Erdrich: stories, cultures, identities	KU - 310, 3:30 PM-5:00 PM
Inglis, John A	"Poetry Is Ontology": Tragedy and Sacrament in Rowan Williams's Theology of the Arts	Marianist Hall Learning Space - 206, 1:00 PM-1:20 PM
Ingram, Jefferson L	How Limitations Placed on University Police Affect the Campus Perception of Law Enforcement	St. Joe's - 25, 2:00 PM-3:00 PM
Jablonski FMI, Leanne M	Drinking for Change: Dayton Aquifer, Bottled Water, Student Choices and Your Ideas	KU - East Ballroom, 2:00 PM-3:00 PM
Jackson, Kurt J	The Feasibility and Effect of a Kickboxing Training Program on the Balance, Gait, and Overall Quality of Life of Persons with Multiple Sclerosis: A Case Series	RecPlex, 9:00 AM-10:30 AM
Janney, Jay J	UD-SBA Flyer Angels: Student insights from a year of making high-tech private equity investments	Miriam Hall - 109, 1:00 PM-2:00 PM
Janney, Jay J	The SOE-SBA Entrepreneurship Collaboration: High-tech innovation projects and insights from B-School students on their experiences	Miriam Hall - 109, 2:20 PM-3:20 PM
Janz, Eric E	Suspension of Solid Mixtures by Mechanical Agitation	RecPlex, 9:00 AM-10:30 AM
Jipson, Arthur J	Patterns and Trends of Juvenile Drug Use	St. Joe's - 13, 4:00 PM-5:00 PM
Jipson, Arthur J	The Forgotten Families? An in-depth Exploration of the Perceptions of Public Child Welfare Employees on the Effects of Parental Incarceration on Families	St. Joe's - 25, 1:00 PM-2:00 PM
Jipson, Arthur J	Prison Rehab: The Road to Sobriety or Recidivism?	St. Joe's - 25, 1:00 PM-2:00 PM
Jipson, Arthur J	DEA vs. the World: Can the Illegal Drug Trade in Afghanistan be Stopped?	St. Joe's - 25, 1:00 PM-2:00 PM
Jipson, Arthur J	Correcting Corrections-Based Programs in Juvenile Detention Centers	St. Joe's - 25, 11:00 AM-12:00 PM
Jipson, Arthur J	How are Juvenile Sex Offenders Perceived by College Students?	St. Joe's - 25, 11:00 AM-12:00 PM
Jipson, Arthur J	Thinking Errors and Cognitive Distortions Among Juveniles	St. Joe's - 25, 11:00 AM-12:00 PM
Jipson, Arthur J	Concealed on Campus: Should students and faculty with a concealed carry permit be allowed to carry firearms on Ohio college campuses?	St. Joe's - 25, 2:00 PM-3:00 PM
Jipson, Arthur J	The Mental Crisis: The use of CIT training for college law enforcement agencies	St. Joe's - 25, 2:00 PM-3:00 PM
Jipson, Arthur J	How Limitations Placed on University Police Affect the Campus Perception of Law Enforcement	St. Joe's - 25, 2:00 PM-3:00 PM
Jipson, Arthur J	DARE to Question Our Countries Juvenile Drug Programs	St. Joe's - 25, 3:00 PM-4:00 PM
Jipson, Arthur J	Pardon Me: An Inquiry Into the Executive Clemency System in Ohio	St. Joe's - 25, 3:00 PM-4:00 PM
Jipson, Arthur J	The CSI effect: A Study in the Perceptions of Crime	St. Joe's - 25, 3:00 PM-4:00 PM
Jipson, Arthur J	Torture: Perceptions, Ethics, and Reality	St. Joe's - 25, 4:00 PM-4:40 PM
Jipson, Arthur J	Human Trafficking Unveiled: Identifying Traffickers and Bringing Them to Justice	St. Joe's - 25, 4:00 PM-4:40 PM
John, Barbara H	How Markets and Organizations Fail: Exploring Illusions of Harmony, Predictability, Stability and Rationality	Miriam Hall -103, 8:00 AM-1:00 PM
Johnson, Kelly S	A Catholic Response to Refugee Resettlement: A Case Study of Catholic Social Services in Dayton, OH	KU - 312, 1:00 PM-1:20 PM
Johnson, Kelly S	Just War as Christian Discipleship: A Critical Examination	Marianist Hall Learning Space - 206, 1:20 PM-1:40 PM
Johnston, William H	Enhancing Adolescent Development through Service Learning	RecPlex, 11:00 AM-12:30 PM
Johnston, William H	The Difference We Make is in the Doing	RecPlex, 11:00 AM-12:30 PM
Johnston, William H	Guiding Little Angels: A Literacy Experience at Holy Angels Elementary School	RecPlex, 11:00 AM-12:30 PM
Johnston, William H	Finding Inner and Outer Peace	RecPlex, 11:00 AM-12:30 PM
Johnston, William H	Illuminating the Issue of Literacy	RecPlex, 11:00 AM-12:30 PM
Johnston, William H	Service Learning: Giving Back to the Community While Learning	RecPlex, 11:00 AM-12:30 PM
Johnston, William H	Learning as a Way of Leading	RecPlex, 11:00 AM-12:30 PM
Johnston, William H	Project READ and Reading with Angels	RecPlex, 11:00 AM-12:30 PM
Johnston, William H	Developing Each Child Academically: Applying Marianist Ideals	RecPlex, 11:00 AM-12:30 PM
Johnston, William H	It Takes a Community to Ensure Equality	RecPlex, 11:00 AM-12:30 PM
Johnston, William H	Helping Angels Find Their Wings	RecPlex, 11:00 AM-12:30 PM
Johnston, William H	Leadership and Service: A Social Justice Approach	RecPlex, 11:00 AM-12:30 PM

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Johnston, William H	Flying with Angels	RecPlex, 11:00 AM-12:30 PM
Johnston, William H	Discovering Peace in Dayton	RecPlex, 11:00 AM-12:30 PM
Jones, Sharon R	Isolation and characterization of peptides that interact with graphene	RecPlex, 9:00 AM-10:30 AM
Kallenberg, Brad J	Distinctive Engineering Students Stemming from UD	KU - 222, 4:20 PM-4:40 PM
Kanet, John J	OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 2 of 3	Miriam Hall - 104, 1:00 PM-2:00 PM
Kanet, John J	OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 1 of 3	Miriam Hall - 104, 11:00 AM-12:00 PM
Kanet, John J	OPS 495 Operations and Supply Management Senior Consulting Project Presentations Part 3 of 3	Miriam Hall - 104, 2:20 PM-3:20 PM
Kanet, John J	Exploring the Job Shop Queuing Environment	RecPlex, 9:00 AM-10:30 AM
Kango-Singh, Madhuri	Hippo signaling controls Dronc activity to regulate organ size in Drosophila.	RecPlex, 9:00 AM-10:30 AM
Kango-Singh, Madhuri	A model to study the influence of Hippo signaling on local cell-cell interactions.	RecPlex, 9:00 AM-10:30 AM
Kango-Singh, Madhuri	Role of signaling pathways in amyloid-Beta-dependent cell death in Drosophila eye	RecPlex, 9:00 AM-10:30 AM
Kango-Singh, Madhuri	Using Drosophila eye mutants to model defects in Microphthalmia or Anophthalmia	RecPlex, 9:00 AM-10:30 AM
Kango-Singh, Madhuri	Role of retinal determination genes in amyloid beta 42 mediated neurodegeneration in the Drosophila retina	RecPlex, 9:00 AM-10:30 AM
Kango-Singh, Madhuri	Functional and Genetic Analysis of Compensatory Responses Induced in Tumors Caused by Loss of Scribble (apical-basal polarity).	RecPlex, 9:00 AM-10:30 AM
Kango-Singh, Madhuri	Lobe (L) interacts genetically with RD factors to promote ectopic eye formation in Drosophila melanogaster	RecPlex, 9:00 AM-10:30 AM
Karns, Margaret P	U.S. Foreign Policy in an Era of Change	Marianist Hall Learning Space - 217, 1:00 PM-4:00 PM
Kavanaugh, Jeffrey L	Hershner Preserve Wetland Restoration	RecPlex, 9:00 AM-10:30 AM
King, Leslie W	Creating the RecBikes Program and Imagining the Future of Biking at U.D.	KU - 310, 1:00 PM-2:00 PM
Kinnucan-Welsch, Kathryn A	Syntheses of Research on Evaluation of p - 12 Teachers	RecPlex, 11:00 AM-12:30 PM
Kinnucan-Welsch, Kathryn A	Syntheses of Research on Technology and Schools	RecPlex, 11:00 AM-12:30 PM
Kinnucan-Welsch, Kathryn A	Syntheses of Research on School Curriculum	RecPlex, 11:00 AM-12:30 PM
Kinnucan-Welsch, Kathryn A	Syntheses of Research on Factors Related to p - 12 Student Achievement	RecPlex, 11:00 AM-12:30 PM
Kinnucan-Welsch, Kathryn A	Syntheses of Research on Extracurricular Activities in p - 12 Schools	RecPlex, 11:00 AM-12:30 PM
Kinnucan-Welsch, Kathryn A	Syntheses of Research on Differences Across Schools and Classrooms	RecPlex, 11:00 AM-12:30 PM
Kinnucan-Welsch, Kathryn A	Syntheses of Research on Inclusion and Students with Disabilities	RecPlex, 11:00 AM-12:30 PM
Kinnucan-Welsch, Kathryn A	Syntheses of Research on Gender Segregation in Schools	RecPlex, 11:00 AM-12:30 PM
Kinnucan-Welsch, Kathryn A	Syntheses of Research on School Policy and the Rights of Individuals	RecPlex, 11:00 AM-12:30 PM
Kinnucan-Welsch, Kathryn A	Factors that Promote Long-term Memory in the American High School Mathematics Classroom	RecPlex, 9:00 AM-10:30 AM
Kirschman, Keri J	Predictors of Cell-phone Driving: A Theory of Planned Behavior Approach	RecPlex, 9:00 AM-10:30 AM
Kozak, Michael J	Music and its Affect on Learning and Studying	RecPlex, 9:00 AM-10:30 AM
Krane, Carissa M	Aquaglyceroporin expression and erythrocyte osmoregulation in cultures from freeze tolerant anuran, Cope's gray treefrog, Hyla chrysoscelis.	RecPlex, 9:00 AM-10:30 AM
Kumar, Binod	Electrical Properties of PEO-based Mixed Conductors	RecPlex, 9:00 AM-10:30 AM
Kunz, Benjamin R	Visual Distance Cues Used for Relative Distance Judgments in 2D Displays	RecPlex, 9:00 AM-10:30 AM
Kunz, Benjamin R	The Role of Visual and Proprioceptive Limb Information in Object Size and Affordance Judgments	RecPlex, 9:00 AM-10:30 AM
Kunz, Benjamin R	The Effect of Context Upon the Perception of Egocentric Distance Using a Walkable Human Muller-Lyer Illusion	RecPlex, 9:00 AM-10:30 AM
Kunz, Benjamin R	Decoupling the Biomechanics of Locomotion and the Direction of Spatial Updating During Blind-walking Tasks	RecPlex, 9:00 AM-10:30 AM
Lafdi, Khalid	Smart Design of Carbon Engineered Tissue Scaffolds	KU - 312, 4:20 PM-4:40 PM
Lafdi, Khalid	Carbon Nanofluids as New Liquid Coolants	RecPlex, 9:00 AM-10:30 AM
Lafdi, Khalid	Synthesis and Properties of Carbon Microcoils	RecPlex, 9:00 AM-10:30 AM
Lafdi, Khalid	The Effect of Heat Treatment and Surface Functionalization on the Bio-Kinetic Behavior of Carbon Nanomaterials	RecPlex, 9:00 AM-10:30 AM
Lang, Jennifer M	Influence of Abiotic Factors on Biofilm Succession in the Little Miami River	RecPlex, 9:00 AM-10:30 AM
Langhorne, Anna L	Fixing The Frame: A Look at the Organizational Culture of Grassroots Organizations	RecPlex, 9:00 AM-10:30 AM
Lasley, Thomas J	What's in Your Neighborhood? The Progress of Public Neighborhood Center Schools in Dayton and Cincinnati	RecPlex, 9:00 AM-10:30 AM
Laubach, Lloyd L	The Influence of Specific Gait Modifications on Medial Knee Loading and Metabolic Cost	KU - 331, 3:00 PM-3:20 PM
Laubach, Lloyd L	Positions in Health and Sport Science	RecPlex, 11:00 AM-12:30 PM
Laubach, Lloyd L	The Effects of a Structured Pedometer Exercise Program on Blood Pressure and BMI of Children Aged 9-12 Years	RecPlex, 9:00 AM-10:30 AM
Laubach, Lloyd L	A Comparison of Metabolic Costs of Forward and Backward Treadmill Walking in Adult Females with a BMI of ¥30.0 and <40.0	RecPlex, 9:00 AM-10:30 AM
Laubach, Lloyd L	Metabolic Equivalents of College-Aged Male Athletes	RecPlex, 9:00 AM-10:30 AM
Layman-Guadalupe, Melissa J	Privacy in Public: Personality and Eriksonian Theory as Applied to College Students' Facebook Disclosure	RecPlex, 9:00 AM-10:30 AM
Layman-Guadalupe, Melissa J	Internet risk awareness as a mediator for the relationship between age and privacy settings on Facebook	RecPlex, 9:00 AM-10:30 AM
Leming, Laura M	Capturing a Snapshot of the Urban Catholic Presence of the Archdiocese of Cincinnati	LTC - Forum, 1:20 PM-1:40 PM
Leming, Laura M	Success in the Non-Profit World: A Case Study of St. Mary Development Corporation	St. Joe's - 13, 3:00 PM-4:00 PM
Leming, Laura M	Communication Devices in the Family: Family Satisfaction in a Hand-Held Technological World	St. Joe's - 13, 4:00 PM-5:00 PM
Leonard, Janet R	The Experiences of Flyer Enterprises	Miriam Hall - 214, 11:00 AM-12:00 PM
Levering, Matthew W	The Wisdom of Style: experiments with genre in recent Christian theology	KU - 222, 3:00 PM-3:20 PM

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Levering, Matthew W	Defining Mary's Sinlessness: The Theological Boundaries of the Dogma Based on the Historical Context of Ineffabilis Deus and the Council of Trent	KU - 222, 3:40 PM-4:00 PM
Levering, Matthew W	The Crisis of Suffering: An Exposition of Chalcedonian and Non-Chalcedonian Christology through the Interpretive Lens of Saint Cyril of Alexandria	KU - 311, 4:00 PM-4:20 PM
Liu, Ruihua	Road Travel Time Estimation with GPS Floating Car Data	RecPlex, 9:00 AM-10:30 AM
Lopper, Matthew E	Inhibition of the PriA and PriB Primosome Proteins of the Neisseria gonorrhoeae Replication Restart Pathway.	RecPlex, 9:00 AM-10:30 AM
Lopper, Matthew E	Do Trends in Bacterial Replication Restart Pathways Depend on the Presence of Primosome Protein DnaT?	RecPlex, 9:00 AM-10:30 AM
Lopper, Matthew E	Study of the mechanism of an inhibitor of DNA replication restart in Neisseria gonorrhoeae	RecPlex, 9:00 AM-10:30 AM
Magnuson, Phillip C	Honors Recital Audition	Sears Recital Hall, 1:00 PM-3:00 PM
Majka, Theophile J	The Choices Students Make In a School Cafeteria	St. Joe's - 13, 2:00 PM-3:00 PM
Majka, Theophile J	Beyond the Golden Door: Exploring the Integration of Iraqi Refugees in the United States	St. Joe's - 13, 4:00 PM-5:00 PM
Malone, Laurie L	Community Wellness Services' Interns Present on Lessons Learned During the 2011-2012 School Year	RecPlex, 11:00 AM-12:30 PM
Marcinowski, Michael G	Fin	ArtStreet - Studio C, 2:40 PM-3:40 PM
McCutcheon, James R	Student Songwriting Concert: Guitar Students of Jim McCutcheon	KU Boll Theatre, 3:00 PM-4:00 PM
McEwan, Ryan W	Beta diversity dynamics across topographic gradients in the herbaceous layer of an old-growth deciduous forest	KU - 211, 3:40 PM-4:00 PM
McEwan, Ryan W	Riparian Forest Invasion by a Terrestrial Shrub (Lonicera maackii) Impacts Aquatic Organic Matter Processing and Biota in Headwater Streams	KU - 312, 2:20 PM-2:40 PM
McEwan, Ryan W	Disturbance and Dynamics in an Old-Growth Forest Remnant in Western Ohio	KU - 312, 2:40 PM-3:00 PM
McEwan, Ryan W	An Ecological and Historical Perspective on the Glen Helen Region of Yellow Springs	RecPlex, 11:00 AM-12:30 PM
McEwan, Ryan W	Re-establishing Native Flora in a Streamside Forest after Removal of the Invasive Shrub Amur Honeysuckle (Lonicera maackii)	RecPlex, 9:00 AM-10:30 AM
McEwan, Ryan W	Comparison of Biofilm Growth on Lonicera maackii and Prunus serotina in a stream environment using Fluorescent Microscopy and Scanning Electron Microscopy	RecPlex, 9:00 AM-10:30 AM
McFarlin, Dean B	UD-SBA Flyer Angels: Student insights from a year of making high-tech private equity investments	Miriam Hall - 109, 1:00 PM-2:00 PM
Merithew, Caroline W	History Matters: Research in Russian and U.S. History	KU - East Ballroom, 1:00 PM-2:00 PM
Merithew, Caroline W	Where Women and Disability Studies Meet: Research and Practice	KU - East Ballroom, 3:00 PM-4:00 PM
Miller, Nancy A	The Diffusion of Human Trafficking Legislation across the American States	KU - 311, 1:20 PM-1:40 PM
Miller, Vincent J	The American Technological Imagination: A Critical Evaluation of Thomas Edison In A Secular Age	KU - 331, 3:40 PM-4:00 PM
Morris, Willie L	Contemporary,Popular and World Music for the saxophone Quartet	KU, 10:30 AM-12:00 PM
Mullins, Monalisa M	Enhancing Adolescent Development through Service Learning	RecPlex, 11:00 AM-12:30 PM
Mullins, Monalisa M	The Difference We Make is in the Doing.	RecPlex, 11:00 AM-12:30 PM
Mullins, Monalisa M	Immigration and Refugee Plunge: A Social Justice Learning Living Cohort Community Project	RecPlex, 11:00 AM-12:30 PM
Mullins, Monalisa M	Guiding Little Angels: A Literacy Experience at Holy Angels Elementary School	RecPlex, 11:00 AM-12:30 PM
Mullins, Monalisa M	Finding Inner and Outer Peace	RecPlex, 11:00 AM-12:30 PM
Mullins, Monalisa M	Illuminating the Issue of Literacy	RecPlex, 11:00 AM-12:30 PM
Mullins, Monalisa M	Service Learning: Giving Back to the Community While Learning	RecPlex, 11:00 AM-12:30 PM
Mullins, Monalisa M	Learning as a Way of Leading	RecPlex, 11:00 AM-12:30 PM
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Mullins, Monalisa M	Discovering Peace in Dayton	RecPlex, 11:00 AM-12:30 PM
Mullins, Monalisa M	Teaching and Learning to Make a Difference	RecPlex, 11:00 AM-12:30 PM
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Murray, Andrew P	Design, Prototyping and Evaluation of an Elastically-Based Mechanical Starter for Automotive Engines	RecPlex, 9:00 AM-10:30 AM
Murray, Andrew P	Novel Concepts for Spring-Based Mechanical Energy Storage in Motor Vehicles	RecPlex, 9:00 AM-10:30 AM
Myers, Kevin J	Suspension of Solid Mixtures by Mechanical Agitation	RecPlex, 9:00 AM-10:30 AM
Myszka, David H	Design, Prototyping and Evaluation of an Elastically-Based Mechanical Starter for Automotive Engines	RecPlex, 9:00 AM-10:30 AM
Myszka, David H	Novel Concepts for Spring-Based Mechanical Energy Storage in Motor Vehicles	RecPlex, 9:00 AM-10:30 AM
Nielsen, Mark G	The Effects of Silver and Titanium Dioxide Nanoparticles on D. melanogaster Life History and Reversal of Effects with Vitamin C Supplementation	KU - 222, 1:00 PM-1:20 PM
Nielsen, Mark G	Differential toxicity of silver and titanium dioxide nanoparticles on Drosophila melanogaster development, reproductive effort, and viability: Size, coatings and antioxidants matter	RecPlex, 11:00 AM-12:30 PM
O'Mara, Erin	Do Autonomous Individuals Strive for Self-Positivity? A Test of the Universal Nature of Self-Enhancement	RecPlex, 9:00 AM-10:30 AM
O'Mara, Erin	The impact of self-esteem level on the interpretation of ambiguous stimuli after a rejection experience	RecPlex, 9:00 AM-10:30 AM

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Ordonez, Raul E	Memory-Based Motion Optimization for Unbounded Resolution	RecPlex, 9:00 AM-10:30 AM
Ordonez, Raul E	Obstacle Avoidance Techniques as Applied to Unmanned Aerial Systems	RecPlex, 9:00 AM-10:30 AM
Ostrander, David B	Sugar, Sugar: How Much Sweetness Do You Really Need	RecPlex, 9:00 AM-10:30 AM
Pair, Donald L	The Future of Sustainable Practices in Campus Buildings: Using a Systems Approach for Decision Making	Science Center - 114 (Auditorium), 1:00 PM-2:00 PM
Phelps, Carolyn R	Privacy in Public: Personality and Eriksonian Theory as Applied to College Students' Facebook Disclosure	RecPlex, 9:00 AM-10:30 AM
Phelps, Carolyn R	Internet risk awareness as a mediator for the relationship between age and privacy settings on Facebook	RecPlex, 9:00 AM-10:30 AM
Phillips-Young, Lori G	A Social Justice Sophomore LLC Service Learning Project	ArtStreet - Studio C, 1:00 PM-1:40 PM
Phillips-Young, Lori G	Putting Faith Into Action: Fostering Education Through Relationships	KU - 311, 3:00 PM-3:20 PM
Phillips-Young, Lori G	Tutoring in the Dayton Public Schools: The Norms and the Disparities of Inner City Education. A Service Learning Project of the Sophomore Social Justice. Cohort	RecPlex, 11:00 AM-12:30 PM
Phillips-Young, Lori G	Enhancing Adolescent Development through Service Learning	RecPlex, 11:00 AM-12:30 PM
Phillips-Young, Lori G	The Difference We Make is in the Doing	RecPlex, 11:00 AM-12:30 PM
Phillips-Young, Lori G	Immigration and Refugee Plunge: A Social Justice Learning Living Cohort Community Project	RecPlex, 11:00 AM-12:30 PM
Phillips-Young, Lori G	Fostering Literacy in Dayton City Schools	RecPlex, 11:00 AM-12:30 PM
Phillips-Young, Lori G	Guiding Little Angels: A Literacy Experience at Holy Angels Elementary School	RecPlex, 11:00 AM-12:30 PM
Phillips-Young, Lori G	Finding Inner and Outer Peace	RecPlex, 11:00 AM-12:30 PM
Phillips-Young, Lori G	Illuminating the Issue of Literacy	RecPlex, 11:00 AM-12:30 PM
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Phillips-Young, Lori G	Flying with Angels	RecPlex, 11:00 AM-12:30 PM
Phillips-Young, Lori G	Understanding Issues Facing Foreign Nationals Navigating the US Immigration Service	RecPlex, 11:00 AM-12:30 PM
Phillips-Young, Lori G	Discovering Peace in Dayton	RecPlex, 11:00 AM-12:30 PM
Phillips-Young, Lori G	Service Learning Benefits the Student and the Tutor	RecPlex, 11:00 AM-12:30 PM
Phillips-Young, Lori G	Improving Literacy in the Miami Valley	RecPlex, 11:00 AM-12:30 PM
Phillips-Young, Lori G	Teaching and Learning to Make a Difference	RecPlex, 11:00 AM-12:30 PM
Phillips-Young, Lori G	You Are Never Too Old To Learn	RecPlex, 11:00 AM-12:30 PM
Phillips-Young, Lori G	Learning as a Way of Service	RecPlex, 11:00 AM-12:30 PM
Phillips-Young, Lori G	Learning by Serving Others	RecPlex, 11:00 AM-12:30 PM
Phillips-Young, Lori G	Service Learning: The Importance of Civic Engagement	RecPlex, 11:00 AM-12:30 PM
Phillips-Young, Lori G	The Challenges, Frustrations, Triumphs and Terrors of Starting and Maintaining a Social Justice Club at UD.	RecPlex, 9:00 AM-10:30 AM
Picca, Leslie H	Socioeconomic Status Impacts on Learning and Development	RecPlex, 9:00 AM-10:30 AM
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Picca, Leslie H	A Culture Forgotten: The Truth about Irish Travellers	St. Joe's - 13, 1:00 PM-2:00 PM
Picca, Leslie H	Fitting In: Body Image within Sorority life at the University of Dayton	St. Joe's - 13, 1:00 PM-2:00 PM
Picca, Leslie H	Lessons Learned: Applying the White Privilege Conference to the University of Dayton	St. Joe's - 13, 11:00 AM-12:00 PM
Picca, Leslie H	The Choices Students Make In a School Cafeteria	St. Joe's - 13, 2:00 PM-3:00 PM
Picca, Leslie H	Joking as Justification: The Intersectionality of Sexism, Racism, and Ethnic Humor	St. Joe's - 13, 2:00 PM-3:00 PM
Picca, Leslie H	The Epidemic of Higher Education among African Americans in their Collegiate Success	St. Joe's - 13, 2:00 PM-3:00 PM
Picca, Leslie H	Transracial Adoption: How White Parents Help Children of Color Form Their Racial and Cultural Identity	St. Joe's - 13, 2:00 PM-3:00 PM
Picca, Leslie H	The Providers: Relationships with Alzheimer's Patients	St. Joe's - 13, 3:00 PM-4:00 PM
Picca, Leslie H	Managing Emotions and Coping Strategies within Pregnancy Help Centers	St. Joe's - 13, 3:00 PM-4:00 PM
Picca, Leslie H	Success in the Non-Profit World: A Case Study of St. Mary Development Corporation	St. Joe's - 13, 3:00 PM-4:00 PM
Picca, Leslie H	Patterns and Trends of Juvenile Drug Use	St. Joe's - 13, 4:00 PM-5:00 PM
Picca, Leslie H	Communication Devices in the Family: Family Satisfaction in a Hand-Held Technological World	St. Joe's - 13, 4:00 PM-5:00 PM
Picca, Leslie H	Beyond the Golden Door: Exploring the Integration of Iraqi Refugees in the United States	St. Joe's - 13, 4:00 PM-5:00 PM
Picca, Leslie H	Thinking Errors and Cognitive Distortions Among Juveniles	St. Joe's - 25, 11:00 AM-12:00 PM
Pici, Joseph R	33: Stories of Flight and Flightlessness in the American Identity	KU - 312, 3:00 PM-3:20 PM
Pico, Suzette	Destination Dayton: Dayton Civic Scholar Junior Cohort Capstone Project	KU - 222, 2:20 PM-3:00 PM
Pico, Suzette	Destination Dayton: Dayton Civic Scholar 2013 Cohort Capstone Project	RecPlex, 9:00 AM-10:30 AM
Pierce, Jason L	Making Money and Making a Difference in Malawi, Africa.	KU - 312, 1:00 PM-1:20 PM

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Pinnell, Margaret F	Varus Knee Alignment and Gait in Healthy College-Aged Females	KU - 211, 4:20 PM-4:40 PM
Portier, William	The Mystery of the Social: On the Origin of Social Ethics and the Nature of the Social in Catholic Moral Theology	KU - 331, 4:00 PM-4:20 PM
Portier, William	The Contested Body: Mystical Body of Christ Theologies in Early Twentieth Century Europe	LTC - Team Space, 11:00 AM-11:30 AM
Powers, Peter E	Project Glasswall: A Better University User Interface	RecPlex, 9:00 AM-10:30 AM
Powers, Peter E	Tapered Optical Fibers for Detection of Volatile Organic Compounds	RecPlex, 9:00 AM-10:30 AM
Qumsiyeh, Maher B	10th Annual Integration Bee	Science Center - 255 (Chudd), 1:00 PM-3:00 PM
Qumsiyeh, Maher B	Integration Bee Lunch	Science Center - Atrium, 12:00 PM-1:00 PM
Rapp, John E	The U.S. Economic Outlook for 2012 and Flyer Fund Sector Weights	Miriam Hall - 118 (Davis Center), 1:00 PM-2:00 PM
Rapp, John E	Buy, Sell or Hold: An In-Depth Look at the Flyer Fund Security Selection Process	Miriam Hall - 118 (Davis Center), 11:00 AM-12:00 PM
Rapp, John E	ROA and ROE as Determinants of Quality in Portfolio Management	Miriam Hall - 213, 2:20 PM-2:40 PM
Rapp, John E	Do Dividends Matter: An empirical analysis of the impact of dividends on portfolio stock selection, portfolio weights, and portfolio returns for S&P 500 .. stocks over the period 2005-2010	Miriam Hall - 213, 2:40 PM-3:00 PM
Rapp, John E	An analysis of idiosyncratic risk and flyer fund performance in thr highly volatile market period 2007-2011	RecPlex, 9:00 AM-10:30 AM
Rapp, John E	Idiosyncratic Risk, Beta and S&P 500 Sector Performance in The Market Period 2005-2011	RecPlex, 9:00 AM-10:30 AM
Rapp, John E	Non Domestic Revenue Trends and Stock Performance for Flyer Fund Stocks 2005-2011	RecPlex, 9:00 AM-10:30 AM
Rapp, John E	An Analysis of Excess Stock Returns and Fat Tail Distributions for Flyer Fund Stocks in the Volatile Market Period of 2007 - 2011	RecPlex, 9:00 AM-10:30 AM
Rapp, John E	An Analysis of Risk Adjusted Returns for Flyer Fund Stocks Over the Period 2007-2011	RecPlex, 9:00 AM-10:30 AM
Rapp, John E	Identifying Portfolio Investment Strategies for High Quality Ranked Stocks in the Highly Volatile Market Period 2008-2011	RecPlex, 9:00 AM-10:30 AM
Rapp, John E	An Analysis of the Returns to High Quality Mega Cap Stocks in Volatile Markets: 2008-2011 as a Case Study	RecPlex, 9:00 AM-10:30 AM
Rapp, John E	Identifying upside and downside performance potential for Flyer Fund Stocks in the high volatile market period, 2007-2011.	RecPlex, 9:00 AM-10:30 AM
Rapp, John E	Upside/Downside Capture Ratios and S&P 500 Sector Returns in Volatile Markets	RecPlex, 9:00 AM-10:30 AM
Rapp, John E	Macro Economic Trends And S&P 500 Sector Returns 2002-2011	RecPlex, 9:00 AM-10:30 AM
Rapp, John E	A Linear Probability Model of the Likelihood of Positive Returns for the S&P 500 Sectors, 2005-2001	RecPlex, 9:00 AM-10:30 AM
Rapp, John E	ROA and ROE as Determinants of Quality in Portfolio Management	RecPlex, 9:00 AM-10:30 AM
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Reeb, Roger N	The Effect of Thin-Ideal Media on Body Image: An Experiment Using the Solomon Four-Group Design	RecPlex, 9:00 AM-10:30 AM
Reeb, Roger N	Recovery from Mental Illness: Further Development of a Measure of Recovery Constructs	RecPlex, 9:00 AM-10:30 AM
Ridenour, Carolyn S	Facebook Use Among Undergraduate Students at The University of Dayton: Creating and Sustaining Community	LTC - Forum, 1:00 PM-1:20 PM
Ridenour, Carolyn S	Social Justice and the Black - White Achievement Gap	RecPlex, 11:00 AM-12:30 PM
Ridenour, Carolyn S	Educating Toward Attitudes in End of Life Care	RecPlex, 9:00 AM-10:30 AM
Robinson, Alexandra L	Dayton Civic Scholars Senior Capstone Project	LTC - Studio, 3:00 PM-4:00 PM
Robinson, Jayne B	Differential toxicity of silver and titanium dioxide nanoparticles on Drosophila melanogaster development, reproductive effort, and viability: Size, coatings and antioxidants matter	RecPlex, 11:00 AM-12:30 PM
Rowe, John J	Differential toxicity of silver and titanium dioxide nanoparticles on Drosophila melanogaster development, reproductive effort, and viability: Size, coatings and antioxidants matter	RecPlex, 11:00 AM-12:30 PM
Sandhu, Sarwan S	Model Formulation and Simulation of a Solid-State Lithium-Based Cell	LTC - Studio, 1:20 PM-1:40 PM
Santamarina, Juan C	US Immigration: The Power Struggle Between the States and Federal Government	RecPlex, 9:00 AM-10:30 AM
Sarangan, Andrew M	Novel wiregrid micropolorizers for visible wavelength polarimetry	KU - 211, 1:40 PM-2:00 PM
Sarangan, Andrew M	Experimental Confirmation of Strong Fluorescence Enhancement Using One-dimensional GaP/SiO2 Photonic Band Gap Structure	RecPlex, 9:00 AM-10:30 AM
Schaller, Molly A	Facebook Use Among Undergraduate Students at The University of Dayton: Creating and Sustaining Community	LTC - Forum, 1:00 PM-1:20 PM
Schaller, Molly A	The pro-social attitudes of sophomore men at the University of Dayton	LTC - Team Space, 4:30 PM-6:30 PM
Schaller, Molly A	Maximizing Faculty Motivation in International Programming	LTC - Team Space, 4:30 PM-6:30 PM
Schaller, Molly A	Why We Attend School: A Qualitative Retention Study at a Proprietary Higher Education Institution	LTC - Team Space, 4:30 PM-6:30 PM
Schaller, Molly A	Student Involvement and Alcohol Consumption	LTC - Team Space, 4:30 PM-6:30 PM
Schaller, Molly A	First-Generation Students and Retention at the University of Dayton	LTC - Team Space, 4:30 PM-6:30 PM
Schaller, Molly A	After-school Programs and Parental/Guardian Impact on Literacy	LTC - Team Space, 4:30 PM-6:30 PM
Schaller, Molly A	Students Perception of Alcohol Induced Blackouts at the University of Dayton	LTC - Team Space, 4:30 PM-6:30 PM
Schaller, Molly A	A Qualitative Study of Returning Resident Assistants Reflecting on Their First Year	LTC - Team Space, 4:30 PM-6:30 PM
Schaller, Molly A	Support, Commitment, and Persistence: Are Students in Supportive Academic Programs More Committed to Their Institutions?	LTC - Team Space, 4:30 PM-6:30 PM
Schaller, Molly A	Illuminating Transformative Learning, Context, and Meaning Making in Adults: A Student Perspective	LTC - Team Space, 4:30 PM-6:30 PM
Schaller, Molly A	Transition Program for Chinese Student at the University of Dayton: A Developmental Perspective and Insight of Intervention for Chinese Student Transition to American Higher Education	LTC - Team Space, 4:30 PM-6:30 PM
Schweikart, Larry E	DEA vs. the World: Can the Illegal Drug Trade in Afghanistan be Stopped?	St. Joe's - 25, 1:00 PM-2:00 PM
Servaites, Jerome C	Solving the Mystery of Mixotrophic Algal Growth	RecPlex, 9:00 AM-10:30 AM
Sidhu, Sukhjinder S	Toxic Organic Pollutants from Combustion of Printed Circuit Board Laminates: A Cone Calorimeter Study	RecPlex, 9:00 AM-10:30 AM
Sidhu, Sukhjinder S	Solving the Mystery of Mixotrophic Algal Growth	RecPlex, 9:00 AM-10:30 AM
Singh, Amit	defective proventriculus (dve), a new member of DV patterning in the eye.	RecPlex, 9:00 AM-10:30 AM

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Singh, Amit	A model to study the influence of Hippo signaling on local cell-cell interactions.	RecPlex, 9:00 AM-10:30 AM
Singh, Amit	Role of signaling pathways in amyloid-Beta-dependent cell death in Drosophila eye	RecPlex, 9:00 AM-10:30 AM
Singh, Amit	Domain specific E3 ubiquitin ligase mediated Wingless degradation promotes Dorso-Ventral lineage in the developing Drosophila eye	RecPlex, 9:00 AM-10:30 AM
Singh, Amit	Role of retinal determination genes in amyloid beta 42 mediated neurodegeneration in the Drosophila retina	RecPlex, 9:00 AM-10:30 AM
Singh, Amit	Isolation and characterization of peptides that interact with graphene	RecPlex, 9:00 AM-10:30 AM
Singh, Amit	Study of developmental interaction of chip and L during DV patterning of Drosophila eye	RecPlex, 9:00 AM-10:30 AM
Singh, Amit	Role of defective proventriculus (dve) in Drosophila eye development.	RecPlex, 9:00 AM-10:30 AM
Singh, Amit	Lobe (L) interacts genetically with RD factors to promote ectopic eye formation in Drosophila melanogaster	RecPlex, 9:00 AM-10:30 AM
Slade, Andrew	The Empathetic Experience of Beauty	RecPlex, 9:00 AM-10:30 AM
Sparks, John R	Kosovo, The Young Europeans: An in-depth study of the effect that the National Branding Campaign has had on the Kosovar Population	Miriam Hall - 213, 3:00 PM-3:20 PM
Strain, Margaret M	A Social Justice Sophomore LLC Service Learning Project	ArtStreet - Studio C, 1:00 PM-1:40 PM
Strain, Margaret M	Putting Faith Into Action: Fostering Education Through Relationships	KU - 311, 3:00 PM-3:20 PM
Strain, Margaret M	Tutoring in the Dayton Public Schools: The Norms and the Disparities of Inner City Education. A Service Learning Project of the Sophomore Social Justice Cohort	RecPlex, 11:00 AM-12:30 PM
Strain, Margaret M	Enhancing Adolescent Development through Service Learning	RecPlex, 11:00 AM-12:30 PM
Strain, Margaret M	The Difference We Make is in the Doing.	RecPlex, 11:00 AM-12:30 PM
Strain, Margaret M	Guiding Little Angels: A Literacy Experience at Holy Angels Elementary School	RecPlex, 11:00 AM-12:30 PM
Strain, Margaret M	Finding Inner and Outer Peace	RecPlex, 11:00 AM-12:30 PM
Strain, Margaret M	Illuminating the Issue of Literacy	RecPlex, 11:00 AM-12:30 PM
Strain, Margaret M	Service Learning: Giving Back to the Community While Learning	RecPlex, 11:00 AM-12:30 PM
Strain, Margaret M	Learning as a Way of Leading	RecPlex, 11:00 AM-12:30 PM
Strain, Margaret M	Project READ and Reading with Angels	RecPlex, 11:00 AM-12:30 PM
Strain, Margaret M	Developing Each Child Academically: Applying Marianist Ideals	RecPlex, 11:00 AM-12:30 PM
Strain, Margaret M	It Takes a Community to Ensure Equality	RecPlex, 11:00 AM-12:30 PM
Strain, Margaret M	Helping Angels Find Their Wings	RecPlex, 11:00 AM-12:30 PM
Strain, Margaret M	Leadership and Service: A Social Justice Approach	RecPlex, 11:00 AM-12:30 PM
Strain, Margaret M	From UD to DECA	RecPlex, 11:00 AM-12:30 PM
Strain, Margaret M	Working Together for a Greater Tomorrow	RecPlex, 11:00 AM-12:30 PM
Strain, Margaret M	Service Learning Benefits the Student and the Tutor	RecPlex, 11:00 AM-12:30 PM
Strain, Margaret M	Improving Literacy in the Miami Valley	RecPlex, 11:00 AM-12:30 PM
Strain, Margaret M	Teaching and Learning to Make a Difference	RecPlex, 11:00 AM-12:30 PM
Strain, Margaret M	You Are Never Too Old To Learn	RecPlex, 11:00 AM-12:30 PM
Strain, Margaret M	The Challenges, Frustrations, Triumphs and Terrors of Starting and Maintaining a Social Justice Club at UD.	RecPlex, 9:00 AM-10:30 AM
Street, Donna L	The IASB Presentation of Items of Other Comprehensive Income: an Analysis of Comment Letters	RecPlex, 9:00 AM-10:30 AM
Striebich, Richard C	High Temperature Gas Chromatographic Analysis of Chlorella Vulgaris	RecPlex, 9:00 AM-10:30 AM
Subramanyam, Guru	Barium Strontium Titanate Varactor-Tuned Spiral Bandstop Filter for Microwave Applications	RecPlex, 9:00 AM-10:30 AM
Subramanyam, Guru	X-band Miniaturized Coplanar Waveguide Band-pass filter with Coupled Resonator	RecPlex, 9:00 AM-10:30 AM
Sullivan, Diane M	UD Business Plan Competition: Insights from the Finalists	Miriam Hall - 109, 11:00 AM-12:00 PM
Swavey, Shawn M	Nickel, copper, and zinc centered ruthenium substituted porphyrins: Effect of transition metals on photoinduced DNA cleavage and photoinduced melanoma cell toxicity	KU - 311, 2:20 PM-2:40 PM
Taft, Robert A	What's in Your Neighborhood? The Progress of Public Neighborhood Center Schools in Dayton and Cincinnati	RecPlex, 9:00 AM-10:30 AM
Taha, Tarek M	Memristor Device Modeling and Circuit Design	KU - 222, 1:20 PM-1:40 PM
Taha, Tarek M	Accelerating Robotic Arm Calibration on GPGPUs	RecPlex, 9:00 AM-10:30 AM
Taha, Tarek M	Optimum Microarchitectures for Neuromorphic Algorithms	RecPlex, 9:00 AM-10:30 AM
Talbott, Anthony N	The Many Different Faces of Modern Day Slavery	KU - 310, 2:00 PM-3:20 PM
Talbott, Anthony N	Slavery through the Ages; An Historical Narrative on Bondage and Ideology and the Institution of Slavery Today	KU - 311, 1:00 PM-1:20 PM
Talbott, Anthony N	The Diffusion of Human Trafficking Legislation across the American States	KU - 311, 1:20 PM-1:40 PM
Talbott, Anthony N	Our Contribution to Slavery as Consumers	KU - 311, 1:40 PM-2:00 PM
Talbott, Anthony N	Life In the South African Townships	KU - 311, 3:20 PM-3:40 PM
Talbott, Anthony N	Human Trafficking: An Explanation of Sex Trafficking	RecPlex, 11:00 AM-12:30 PM
Talbott, Anthony N	Human Trafficking: An Explanation of Bonded Labor	RecPlex, 11:00 AM-12:30 PM
Talbott, Anthony N	Human Trafficking: Forced Agricultural Labor in the US	RecPlex, 11:00 AM-12:30 PM
Talbott, Anthony N	Human Trafficking: An Explanation of Debt Bondage among Migrant Laborers.	RecPlex, 11:00 AM-12:30 PM
Talbott, Anthony N	Human Trafficking: An Explanation of Forced Child Labor.	RecPlex, 11:00 AM-12:30 PM
Talbott, Anthony N	Human Trafficking: An Explanation of Child Soldiers	RecPlex, 11:00 AM-12:30 PM
Talbott, Anthony N	Human Trafficking: An Explanation of Involuntary Domestic Servitude	RecPlex, 11:00 AM-12:30 PM
Talbott, Anthony N	Human Trafficking: An Explanation of Forced Labor	RecPlex, 11:00 AM-12:30 PM
Talbott, Anthony N	Human Trafficking: An Explanation of Child Sex Trafficking.	RecPlex, 11:00 AM-12:30 PM

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Talbott, Anthony N	Human Trafficking Unveiled: Identifying Traffickers and Bringing Them to Justice	St. Joe's - 25, 4:00 PM-4:40 PM
Taylor, Annette M	Who Is a Journalist?	RecPlex, 11:00 AM-12:30 PM
Taylor, Annette M	Sexual Assault on College Campus	RecPlex, 11:00 AM-12:30 PM
Taylor, Denise G	ISOLATION AND CHARACTERIZATION OF WASTEWATER PHAGE	RecPlex, 9:00 AM-10:30 AM
Taylor, Philip H	High Temperature Gas Chromatographic Analysis of Chlorella Vulgaris	RecPlex, 9:00 AM-10:30 AM
Thomas, Patrick	"Teacher or Learner?: Graduate Teaching Assistants' Negotiated Identities and Student Response"	KU - 331, 3:20 PM-3:40 PM
Thompson-Miller, Ruth	Lessons Learned: Applying the White Privilege Conference to the University of Dayton	St. Joe's - 13, 11:00 AM-12:00 PM
Thompson-Miller, Ruth	Joking as Justification: The Intersectionality of Sexism, Racism, and Ethnic Humor	St. Joe's - 13, 2:00 PM-3:00 PM
Tillman, Beverly A	Cultural Competence: A Personal Journey to Becoming a Culturally Relevant Educator	RecPlex, 9:00 AM-10:30 AM
Titlebaum, Peter J	History of Social Media and how they track it success	LTC - Team Space, 1:00 PM-1:20 PM
Titlebaum, Peter J	Understanding Best Practice of College Student Athletic Department Support Groups	LTC - Team Space, 1:20 PM-1:40 PM
Troha, Joanne M	The Transformation of The Wheels for Kids Organization from a First Year Engineering Design Project to a Year-Long Service Learning Project	RecPlex, 9:00 AM-10:30 AM
Tsonis, Panagiotis A	Smart Design of Carbon Engineered Tissue Scaffolds	KU - 312, 4:20 PM-4:40 PM
Tsonis, Panagiotis A	Comparison of Notophthalamus viridescens Transposon Expression in the Dorsal and Ventral Iris during Lens Regeneration	RecPlex, 9:00 AM-10:30 AM
Tsonis, Panagiotis A	Induction of Chromatin Remodeling using Histone Deacetylase Inhibitors to Study Role of Oct4 in Notophthalmus viridescens (Newt) Eye Regeneration	RecPlex, 9:00 AM-10:30 AM
Tsonis, Panagiotis A	Regulating Proliferation and Differentiation of Notophthalmus viridescens' Immortal Cells in vivo	RecPlex, 9:00 AM-10:30 AM
Tsonis, Panagiotis A	PCL Nanofibers Induce Lens Fiber Formation of Mouse Lens Epithelial Cells	RecPlex, 9:00 AM-10:30 AM
Usman, Muhammad	Numerical Study of a Mathematical Model of IL-2 Adoptive Immunotherapy on Patients with Metastatic Melanoma	RecPlex, 11:00 AM-12:30 PM
Usman, Muhammad	Mathematical Study of the Foot and Mouth Outbreak Model	RecPlex, 11:00 AM-12:30 PM
Usman, Muhammad	Qualitative Study of an SIR epidemic model with an asymptotically homogeneous transmission function	RecPlex, 11:00 AM-12:30 PM
Usman, Muhammad	Comparison of Numerical Methods for Analysis of the Diffusion of Soluble Proteins Through Sensory Cilia	RecPlex, 11:00 AM-12:30 PM
Usman, Muhammad	Infectious Disease Mathematical Modeling of the 2001 Foot and Mouth Outbreak	RecPlex, 11:00 AM-12:30 PM
Usman, Muhammad	Numerical Investigation into a Computational Approximation of Bifurcation Curves	RecPlex, 9:00 AM-10:30 AM
Usman, Muhammad	Stability Analysis of a Model for In Vitro Inhibition of Cancer Cell Mutation	RecPlex, 9:00 AM-10:30 AM
Vermillion, Donald A	Destination Dayton: Dayton Civic Scholar Junior Cohort Capstone Project	KU - 222, 2:20 PM-3:00 PM
Vermillion, Donald A	Destination Dayton: Dayton Civic Scholar 2013 Cohort Capstone Project	RecPlex, 9:00 AM-10:30 AM
Wagner, Peter G	Become a world citizen with the School of Business Administration Summer Study Abroad, Semester Exchange, ETHOS (Engineers in Technical Humanitarian Opportunities of Service Learning, and other programs.	Miriam Hall - 119 (O'Leary), 11:00 AM-2:00 PM
Watkins, David J	Minority Rights and the Movement of Peoples	St. Joe's - 23, 1:00 PM-2:00 PM
Watkins, David J	Examining religious exemptions to general laws	St. Joe's - 23, 2:00 PM-3:00 PM
Watkins, David J	Delivering Justice in Multicultural and Multiethnic societies	St. Joe's - 23, 3:00 PM-4:00 PM
Watras, Joseph L	Inclusive Instruction: A New Approach to Accessibility	LTC - Studio, 1:00 PM-1:20 PM
Whisnant, Rebecca S	Addressing Human Rights Abuses in Women's Prisons with a Gender-Responsive Model	LTC - Studio, 1:40 PM-2:00 PM
Whisnant, Rebecca S	Support Networks for Mothers in University Faculty	RecPlex, 9:00 AM-10:30 AM
Whitaker, Jayne M	Visual Identity: A Problem-solving Approach to Identity Design	ArtStreet - Studio E, 2:00 PM-3:00 PM
Whitaker, Joel A	Senior Capstone Projects in Photography	ArtStreet - Studio B, 1:00 PM-2:00 PM
Wilkens, Robert J	Effects of Pipe Orientation on Multi-phase Flow Patterns	RecPlex, 9:00 AM-10:30 AM
Williams, Patrick K	Temporal and Spatial Distribution of an Anuran Chytrid Fungus: Comparison of the Amphibians from Fragmented Forests in Hardin County, Ohio	RecPlex, 9:00 AM-10:30 AM
Williams, Patrick K	Get Fit, Save Energy; Powering the Rec Through Energy-Generating Equipment	RecPlex, 9:00 AM-10:30 AM
Williams, Thomas M	The mutations, molecular mechanisms, and constraints directing the evolution of a Drosophila cis-regulatory element	RecPlex, 9:00 AM-10:30 AM
Williams, Thomas M	Visualizing Evolution through Differences in Gene Expression	RecPlex, 9:00 AM-10:30 AM
Williams, Thomas M	Identifying cis-regulatory element changes that underlie gene expression and phenotypic evolution between species	RecPlex, 9:00 AM-10:30 AM
Williams, Thomas M	An evolutionary characterization of regulatory linkages in a genetic network for an evolved fruit fly trait.	RecPlex, 9:00 AM-10:30 AM
Williams, Thomas M	The bab Locus Model for Synergistic Gene Regulatory Interactions in Development and Evolution	RecPlex, 9:00 AM-10:30 AM
Wright Cron, Amanda J	Ethnographies of Non-profit Organizations Confronting Food Insecurity	ArtStreet - Studio B, 2:00 PM-4:30 PM
Wright Cron, Amanda J	Business Communication at ArtStreet Cafe	RecPlex, 11:00 AM-12:30 PM
Wright Cron, Amanda J	Flyer Enterprises: The Blend, A Business Communications Study	RecPlex, 11:00 AM-12:30 PM
Wright Cron, Amanda J	Communication Tactics in Information Technology	RecPlex, 11:00 AM-12:30 PM
Wright Cron, Amanda J	Observing Communication Practices in the Davis Center for Portfolio Management	RecPlex, 11:00 AM-12:30 PM
Wright Cron, Amanda J	Flyer For-ex Fund	RecPlex, 11:00 AM-12:30 PM
Wright Cron, Amanda J	Investigating and Improving Communication in the Center of International Program's (CIP) International Student and Scholar Services (ISSS)	RecPlex, 9:00 AM-10:30 AM
Wu, Shuang-Ye	Changes in Precipitation Regimes in the United States	KU - 312, 3:40 PM-4:00 PM
Wu, Shuang-Ye	Changes in Precipitation Regimes in the United States	RecPlex, 9:00 AM-10:30 AM
Young, Pamela R	Social Justice and the Black - White Achievement Gap	RecPlex, 11:00 AM-12:30 PM
Zhan, Qiwen	Experimental Confirmation of Strong Fluorescence Enhancement Using One-dimensional GaP/SiO2 Photonic Band Gap Structure	RecPlex, 9:00 AM-10:30 AM

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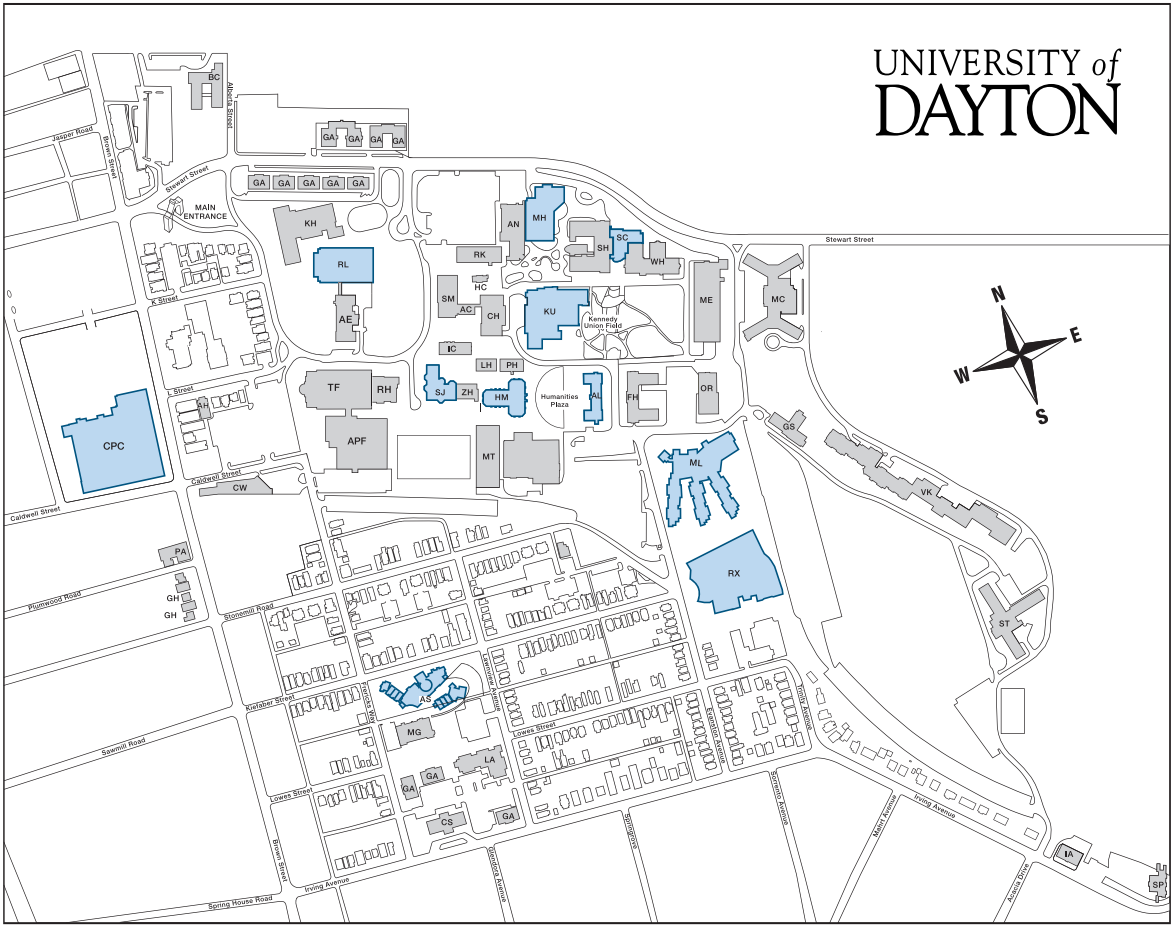

LOCATOR	CODE	BUILDING NAME
I5	AE	Albert Emanuel Hall
H8	AL	**Alumni Hall**
H3	AH	Alumni House
J7	AN	Anderson Center
I6	AC	Arcade
C6	AS	**ArtStreet**
G5	APF	Athletics Practice Facility
L3	BC	Bombeck Family Learning Center
G3	CW	Caldwell Street Center
B6	CS	Campus South
I7	CH	Charminade Hall
I6	IC	Chapel
G2	CPC	**College Park Center**
H5	TF	Fiericks Center
H9	FH	Founders Hall
K4/C6	GA	Garden Apartments
H11	GS	Gosiger Hall
E3	GH	Guest Houses
J7	HC	Heritage Center
H7	HM	**Humanities Center (Sear Recital Hall)**
A14	IA	Irving Avenue Apartments
J4	KH	Keller Hall
I8	KU	**Kennedy Union**
G7	KL	Kettering Labs
G12	VK	Virginia W. Kettering Hall
C7	LA	Lawnview Apartments
H7	LH	Liberty Hall
G9	ML	**Marianist Hall (Learning Space)**
I10	MC	Marycrest Complex
C6	MG	McGinnis Center
I10	ME	Mechanical Engineering Building
K8	MH	**Miriam Hall**
G7	MT	Music/Theatre Building
H10	OR	O'Reilly Hall
F3	PA	Plumwood Apartments
H7	PH	Powerhouse
H5	RH	Reichard Hall
E10	RX	**RecPlex**
J7	RK	Rike Center
J5	RL	**Roesch Library (LTC)**
J9	SC	**Science Center**
J8	SH	Sherman Hall
A15	SP	Shroyer Park Center
H6	SJ	**St. Joseph Hall**
I6	SM	St. Mary's Hall
E13	ST	Stuart Complex
J9	WH	Wohlleben Hall
H6	ZH	Zehler Hall

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