



Fall 2014

Honors Research Symposium Program Fall 2014

University Honors Program Students and Staff

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Georgia Southern University
University Honors Program



Fall 2014
Honors
Research
Symposium

Fall 2014 Honors Research Symposium

Nessmith-Lane Conference Center

Program Schedule

Reception.....5:45 pm to 6:15 pm

Room 2911

Welcome

Dr. Steven Engel

Thesis/ Capstone Presentations.....6:15 pm to 7:50 pm

Rooms 2901, 2904, and 2905

Session I.....6:15 pm to 7:00 pm

Session II.....7:05 pm to 7:50 pm

Presentation of Medallions.....7:55 pm to 8:15 pm

Thesis Presentations

Session I: 6:15 pm to 7:00 pm

Room 2901

Michael Ackerman.....Mathematics
Cluster Numbers and Percolation Models
Dr. Hua Wang

Percolation theory was officially introduced in 1957 to model the flow of fluids through porous material. This topic has since been extensively studied and generalized to many applications in industry, physics and related areas. In this presentation I will demonstrate the types of questions typically asked of percolation models while discussing elements of graph theory, probability and difference equations.

Micah Jackson.....Mathematics
Explorations of the Collatz Conjecture (mod m)
Dr. David Stone

In full, the conjecture states: Begin with any positive integer and generate a sequence as follows: If a number is even, divide it by two. Else, multiply by three and add one. Repetition of this process will eventually reach the value 1. We examine sequences associated with this process.

William Tyler Stone.....Justice Studies and Information Technology
An Analysis and Examination of College Undergraduates Perceptions of Women in Law Enforcement
Dr. Adam Bossler

This study surveyed 172 college undergraduates at Georgia Southern University to examine perceptions of women as law enforcement officers in various scenarios. The findings from this research suggest that students with an increased sense of equality of the genders were more likely to prefer female officers in certain scenarios.

Thesis Presentations

Session I: 6:15 pm to 7:00 pm

Room 2904

Rachel Burke.....Chemistry
The Synthesis and Biological Activity of Iron Binding Motifs
Dr. Michele McGibony

Iron overload is a medical condition characterized by an excess of iron in the bloodstream. Current iron therapies are time-consuming, costly, and painful. Derivatives of TRENTOX drugs were synthesized to increase effectiveness in physiological conditions. Then, iron-binding studies were performed for the derivatives, and for other first row transition metals.

Charles Powell.....Biology
Immunohistochemical localization of aquaporin 4 and cloning of aquaporin 3a expressed in the seawater acclimated kidney of the American eel (*Anguilla rostrata*)
Dr. Christopher Cutler

Immunohistochemical staining allowed localization of aquaporin 4 (AQP4) in the basolateral and apical membranes of the renal tubule epithelial cells of the American eel, *Anguilla rostrata*, acclimated to seawater (SW).

Eboni Pullen.....Chemistry
Biochemical Analysis of Potential Photodynamic Therapy Agents
Dr. Michele McGibony

Photodynamic therapy agents are compounds that reduce the size of tumors, treat skin diseases, and inactivate viruses. Manganese porphyrins, activated via a 488 nm laser, were studied as potential photodynamic therapy agents, and their rate of DNA cleavage was analyzed using DNA gel electrophoresis and UV-Visible spectroscopy.

Thesis Presentations

Session I: 6:15 pm to 7:00 pm

Room 2905

Christa Murray.....Psychology
Predicting problematic alcohol use and negative alcohol-related psychosocial consequences of use in a college-aged sample
Dr. Jessica Brooks

The purpose of the present study was to determine to what extent motivation to drink and styles of coping predicted problematic alcohol use, as well as to what extent problematic alcohol use predicted the different consequences of use.

Julie Odom-Dixon.....Psychology
Do Narcissists Tend to Create a Physically Attractive Veneer?
Dr. Nicholas Holtzman

Are people high in the Dark Triad inherently attractive or are they simply more likely to dress up in ways that make themselves more attractive? After being photographed, participants were asked to complete several Dark Triad surveys. The results indicated that narcissism correlated positively—although not significantly—with effective adornment.

Taylor Thomas.....Psychology
Understanding Tendencies of Aggressive Behavior and Cognition as Related to Alcohol Use and Intimate Partner Violence
Dr. Jessica Brooks

Alcohol use is a leading risk-factor for intimate partner violence, high levels of which can predict an increase in aggression in individuals with aggressive dispositions. Findings from this study elucidate the complex relationships between cognitive processes, aggressive dispositions, problematic alcohol use, and IPV.

Thesis Presentations

Session II: 7:05 pm to 7:50 pm

Room 2901

Cady Ennis.....Writing and Linguistics
The Double-Headed Eagle
Dr. Lisa Costello

The Double-Headed Eagle is a hybrid genre piece that aims to foster acceptance of differences through the juxtaposition of memoir, fiction, and poetry based on theories of layered memory and inspired by my trip to Albania in 2012.

Shauntel Hall.....Journalism
How Higher Education Institutions Utilize Social Media
Dr. Camille Broadway

Social media is an innovative technology that is causing a dynamic impact on communication. This study aims to evaluate how higher education institutions are utilizing social media and detect any differences in use among the different types of institutions in the University System of Georgia.

Amber Porter.....International Studies
Casting a Light: Interviews and Insight into the Hindu Caste System
Dr. Darin Van Tassell

Through a series of five interviews, this research investigates the question of what life is like for a Hindu university student. Their stories aim to give a better understanding of an ancient system surrounded by rumors and stigma.

Thesis Presentations

Session II: 7:05 pm to 7:50 pm

Room 2904

Carolina Perez.....Modern Languages
Beethoven Ahead of His Time: *Sonata in C major No. 21 Op. 53*
Dr. David Murray

This research looks at the work of Ludwig van Beethoven's *Sonata in C major No. 21 Op. 53*. A historical, theoretical, and technical analysis helps set a foundation for a better comprehension of the work and influence the overall performance.

Benny Ratliff.....Music Education
The Effects of Years in Band on Music Preference
Dr. Laura Stambaugh

This project investigates the effects of years in band on music preference. Students were surveyed from 6th to 12th grade using a Likert scale based on enjoyment. A wide variety of musical styles and difficulty were included to determine how student preference changed throughout their years in band.

Sydney Sewell.....Music Education
A Choral Conducting Portfolio
Dr. Laura Stambaugh

This project is a cumulative portfolio of my work as a conductor during the past two years of undergraduate study. It is designed to prepare me for both graduate school auditions and the graduate level work-load. I have evaluated myself as a conductor, filmed videos of myself conducting rehearsals and performances, attended conducting master classes and completed a comprehensive analysis of choral works that I have studied or conducted.

Thesis Presentations

Session II: 7:05 pm to 7:50 pm

Room 2905

Samantha Goldberg.....Nursing
I've Been Diagnosed: A Champion! Crohn's & Colitis Family Day
Dr. Deborah Allen

This Honors thesis outlines the creation of "I've Been Diagnosed: A Champion! Crohn's & Colitis Family Day"—an experience designed to provide Southeast Georgia children and families affected by inflammatory bowel disease (IBD) an opportunity to enhance community involvement and build a support network through recreation, team-based activities, education, and a positive family-centered environment.

Quierra Jones.....Nursing
Pink Goes Red for a Day: Is Your Heart Healthy?
Dr. Ellen Hamilton

There is a major lack of public health education among college aged students at many colleges and universities across the country. On February 4, 2014, I presented a program through my sorority entitled Pink Goes Red for a Day in which I educated the primarily minority college student population attending about heart health.

Michaela Kennedy.....Early Childhood Education
The Benefit of Field Trips
Dr. Meca Williams-Johnson

This study seeks to investigate episodic memory through elementary level field trips. While many studies explain how episodic memory stores information from experience, this study seeks to explore what people retain and how it has impacted their learning about the subject matter.

About Honors

The University Honors Program provides a small college atmosphere in the context of a large comprehensive university. The program is designed to foster the development of a critical sense of inquiry, a spirit of creativity, a global perspective and an ethic of civil responsibility. A hallmark of the program is the emphasis on bringing ideas to life through undergraduate research, experiential learning, and service learning opportunities.

The University Honors Program at Georgia Southern University rests on the foundation of the following ideals that are inspired by the institution's emphasis on engaged learning.

A Critical Sense of Inquiry

Honors students will explore a variety of approaches to research designed to foster the pursuit of knowledge. Students will develop the ability question with a healthy skepticism toward accepted opinion. The culmination of the undergraduate experience is an independent research or creative project designed to exemplify a critical approach to inquiry.

The Spirit of Creativity

Honors students will embrace the idea that creativity is a virtue that should be experienced by all students, regardless of discipline. This spirit involves a respect for different ways of knowing and an openness to intellectual discussion and challenge.

Civic Responsibility

Honors students will demonstrate an ethic of civic responsibility and exemplify the motto of the program, "Humility before Honor." Students will be challenged to use their abilities and talents for the advancement of humanity and the pursuit of a greater good. The primary vehicle for the expression of civic responsibility is through service both to the university and the community.

A Global Perspective

Honors students will develop a perspective which allows them to approach their chosen discipline from an international point of view. This outlook involves the critical exploration of global concerns and proposed solutions to international problems. Honors education provides this worldwide perspective through academic courses, study abroad opportunities and co-curricular experiences.



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Designed by Nicole Puckett ('15)