2016

“Thinking Matters”

Senior Projects in the
College of Arts and Sciences
The Senior Project

Drawing on study in the College’s program of General Education and those understandings and skills learned through advanced disciplinary study, each senior undertakes a project appropriate to her or his field of study: a researched essay, statistical study, report on a laboratory experiment or field observation, poster presentation, gallery or stage presentation, computer program, or creative work. Some seniors elect to join their professors in research projects. Others design their own projects and through independent study follow their own intellectual passions. In some cases, those who have pursued two majors for advanced study might design one project that satisfies the capstone requirement in both disciplines simultaneously. In other cases, those with two majors might, owing to different disciplinary expectations, complete two distinct projects, one for each major. Students work with advisers to determine what is feasible given their particular interests and major requirements. Through the Honors Program, students may elect to design their own course of study and senior project. All seniors find their study energetically supported by the University’s resources, especially a teaching faculty dedicated to fostering scholarship by undergraduates and a library faculty expert in supporting their research. All of the University’s advanced instrumentation and research facilities are readily available to seniors for their research.

While disciplines in the College approach the senior project in different ways, the goal is the same: to hone skills of close reading, careful observation, quantitative analysis, forceful speaking, and persuasive writing through a project of the student’s own choosing. Every project requires imaginative design at the outset and demands the persistence to see an extended task to completion. Exemplary senior projects are presented at the Stetson Undergraduate Research and Creative Arts Showcase each spring. Seniors also regularly present their work at conferences or publish with their faculty advisers in professional journals. Successfully completing a senior project is a capstone experience for all students in the College.
2016
“Thinking Matters”
Senior Projects in the
College of Arts and Sciences

Aquatic and Marine Biology

Robert Barber
Light as a Possible Reintroduction Limitation for Propagation of *Vallisneria americana* (Variety Suwannee Narrow) in Volusia Blue Spring

Danielle Barnes
Bottlenose Dolphin (*Tursiops truncatus*) Survival in Captivity

Miranda Camp
Does Body Type Really Matter? Relating Climate Change, Coral Morphology and Resiliency

Joshua Cappabianca
Gender Differences in the Otoliths of the Vermiculated Suckermouth Sailfin Armored Catfish (*Pterygoplichthys disjunctivus*) in Blue Spring, Florida

Kristen Meiler
Effect of Salinity on Embryonic Axolotl Development

Genevieve Patrick
Gut Content Analysis Comparing the Sailfin Molly (*Poecilia latipinna*) and Eastern Mosquitofish (*Gambusia holbrooki*) in Volusia Blue Spring

Tahirah Scott-Anderson
Air Breathing in Juvenile *Pterygoplichthys disjunctivus* (Loricariidae)
**Art – with Emphasis in Art History**

*Gisela Alvarez*
Market is Always Right: Jeff Koons' *Made in Heaven* (1989-1991)

*Erica Lomberk*
It's All in the Mind: The Role of Synesthesia in the Development of Nonobjective Art

**Art – with Emphasis in Studio Art**

*Gisela Alvarez*
All You Can Carry

*Elizabeth Frates*
Wait with Me

*Danielle Grisham*
Generic Princess

*Taylor Gunderson*
Seven Deadly Sins

*Erin McCollum*
Imperious

**Biochemistry**

*Javed Barsati*
Lewis Acid-Catalyzed Cycloadditions of Azides and Donor-Acceptor Cyclopropanes

*Heather Lee*
Synthesis, Characterization, and Biological Activity of a Triclosan/Sulfanilic Acid Azo Dye

*Lauren Pearson*
Preparation and Characterization of Aqueous Extracts from the Beauty Berry Bush *Callicarpa americana*

*David Perez*
Experimental and Theoretical Studies of DREAM Dynamics and the Effects on Ligand Binding
Biology

Stephanos Alichos
The Effect of *Bidens alba* Seed Density on the Germination of Three Native Sandhill Species

Hayley Barr
Behavioral and Neurological Aggression in Norway and Wistar Rats

Daniel Brooke
Evaluation of Gut Bacteria and Fungi in *Drosophila melanogaster*

Nicolette Birky
Hormonal Control of Maternal Behavior in Pigmy Rattlesnakes

Benjamin Chase
The Effect of Herbivory on Floral Volatile Production in *Passiflora incarnate*: A Bioassay with Honeybees

Jordan Cockfield
Flaxseed Lignan, Enterolactone, Found to Induce Apoptosis in Non-Small Cell Lung Carcinoma Cells

Anja Erwin
Effect of *Trichechus manatus latirostris* on Blue Spring Food Web Using Stable Isotope Analysis

Adriel Gonzalez
Changes in Water Quality Characteristics across Time and Levels of Land Development for 10 Freshwater Lakes in DeLand, Florida

Arianna Hall
Survival of the California Sea Lion (*Zalophus californianus*) in Captivity

Hailey Hernandez
Genotype by Sequencing Improves Resolution of Genetic Relationships among Stonefly Clades in the Great Basin

Jane Ketcham
The Effect of Prey Odors on Foraging Location Choice in Neonate Pigmy Rattlesnakes

Kenneth Massa
Effects of Fetal Bovine Serum Growth Media on Puerarin-Induced Jurkat Leukemia Apoptosis

John Massey
The Effect of Pregnancy on Immune System Function in Pigmy Rattlesnakes

Cierra McCoy
Snake Fungal Disease and Immune System Function in Pigmy Rattlesnakes
Whitney Meyers
Fos Immunoreactive Neurons in the Lateral Dysgranular Insular Cortex are Associated with Ingestive Behaviors Elicited by Sucrose in Conscious Rats

Naser Mubarak
Comparable Levels of Peroxidase Activity in Daidzin Treated and Untreated Jurkat Leukemia Cells

Tabitha Petri
Restoration of Sandhill Ecosystems: The importance of soil fungi on the growth of a native perennial, *Liatris tenuifolia*

Anita Porth
The Effect of Maternal Body Condition on Maternal Attendance Behavior in Pigmy Rattlesnakes

Victoria Ramirez
The Effects of Epinephrine Soaked Gauze on Wound Healing

Holly Saulsbery
Testing Two Florida Lakes for Cylindrospermopsis, a Cyanotoxin Produced by *Cylindrospermopsis raciborskii*

Kevin Serrano
The Benefits of Carbon Nanotube Scaffolding on Neuronal Growth

Kathryn Sitterle
Evaluation of Gut Bacteria and Fungi in *Drosophila melanogaster*

Kendale Speyerer
Determining Aerial Respiration Threshold of *Pterygoplichthys disjunctivus* (Loricariidae)

Ricardo Vallejo
The Cytotoxic Effects of Daidzin on H-460 Lung Cancer Cells

Erika Webb
Comparison of *Toxocara* Levels between Areas of Low and High Feral Cat Density

Erin Webb
The Effect of Personality and Crypsis on the Shoaling Tendencies of *Lucania parva* and *Lucania goodei*

Chemistry

Tracy-Lynn Cleary
Photoreactivity of 2-Methoxy-4-(2-phthalimidinyl)phenylsulfonyl Chloride
Maegan Davis
The Effects of Ethanol Addition on Water Absorption in Gasoline

Jessica Driver
A Computational Investigation of Hydrogen Bonding in the Methyl Acetate and Imidazole Dimer

Jaime Fields
Fluorescent Gold Nanoparticles for Cellular Biomedical Applications

Connor Harting
Using Polarimetry to Study Protein Secondary Structure: An Undergraduate Biochemistry Lab Activity

Gabrielle Johannessen
Characterization of the Essential Oil Isolated from the Yellow Anise Tree *Illicium parviforum* using GC-MS

Keilya Kasprzyk
Synthesis, Characterization, and Biological Activity of a Triclosan/Aniline Azo Dye

Ashley Krineski
Lewis Acid-Catalyzed Cycloadditions of Epoxides and Donor-Acceptor Cyclopropanes

Erica Lomberk
The Synthesis of Demethylated Curcumin and the Potential Disaggregation Effects of Curcuminoids and Curcumin Analogs on Beta-Amyloid Plaques

Ignacio Madrid
Selective Assay for Triclosan Detection Using Fluorescein via an Epoxide Linkage

John-Albert Moran
Quantitative Analysis of Organophosphate Pesticides by $^{31}$P-NMR Spectroscopy

Christina Tiffany
Examining the Impact of Alkene Substitution on Copper(I)-Alkene Binding Interactions: A DFT Study

Communication and Media Studies

Taylor Alvarez
Hope and Revenge: Crisis Rhetoric in the Early Speeches of President George W. Bush following 9/11

Kreshna Billings
The Ebola Epidemic as Narrative: *Time* Magazine and the Creation of Moral Panic

**Sarah Dean**

Tomorrow Never Knows: The Use of Identification in the Post-1966 Songs of Lennon and McCartney

**Cameron Harvey**

Guilty Until Proven Innocent: Nancy Grace, Presumption, and the Duke Lacrosse Team

**Ariel Marsh**

Telling the Story: Narrative Construction in Bill O'Reilly's Broadcast Coverage of the Trayvon Martin Case

**Cory Reid**

A Legacy in Jeopardy: Media Analysis of Barry Bonds' Controversial Homerun Record Pursuit

**Kirsten Scarborough**

Citrus Grower Perspectives on the Florida Department of Citrus’ Communication Efforts Regarding the Current Greening Crisis

**Jonathan Tedford**

Social Roles, Social Media, and Celebrity: Kim Kardashian and the Construction of Identity

**Kimberly Villegas**

Ideological Social Messages: Motifs and Culture in Disney's *The Lion King*

**Raymond Witherspoon**

Campaigns and Protests: The Use of Administrative Rhetoric by 2016 Presidential Candidates in Response to the Black Lives Matter Movement

**Ariel Zeig**

Redefining Romance: *Vicky Cristina Barcelona’s* Role in Familiarizing Audiences with Non-Monogamy

---

**Computer Science**

**Melissa Abramson**

Signer-Independent Recognition of Static ASL Signs

**Christopher Brackett**

Comparing Standard C++ and Headers-Only Library Implementations

**Sebastian Florez**

Cost Effective IR-Free Eye Tracking on Mobile Devices
Michael Fye
Creating a Virtual Juggling Simulator Using the Microsoft Kinect for Xbox One

Antonio Garcia
An iPhone Augmented Reality Game Application with RESTful Backend

Rahkeem George
Analyzing the Development Process with Git Repositories

Jacob Koko
Cost Effective IR-Free Eye Tracking on Mobile Devices

Christian Micklisch
Modeling and Simulation of a Distributed Multi-Behavioral Control for Fully Autonomous Quadrotors

Katherine Porterfield
Using brain waves and machine learning techniques to detect errors in human problem solving

Antonio Ruiz
Abnormal Crowd Behavior Detection

Digital Arts

Geordan Banks
City of Tears

Adriel Calvo
Sea of Sadness

Nicole Frechette
Behind closed Doors

Jacob Helwig
A Study on Faith

Benjamin Griffith
The Octavian Spirits
Emily McDeed
Frozen: The Missing Denouement

Jean Paul Menegolo
Cross the Sea

Kyle Simmons
Somewhere Out There: A Feel Good LP Album

Monica Wolski
Alterspace

Economics

Jacob Robert Martin
Investigating the Automotive Industry

Neri Alexandra Ordaz
Disease in Former Soviet Union Republics: An Economic Analysis of Dutch Disease in Oil-Rich Azerbaijan, Kazakhstan, and Russia

Marcus Stovall
Analyzing Various Community Development Strategies Being Implemented To Revitalize the Spring Hill Community of Deland, Florida

Mary Ellen Wenzell
Demanding Sex: The Factors Driving Demand of Human Trafficking for Sexual Exploitation

Elementary Education

Floriana Antonine
Homelessness Affecting Students

Nicole Clendenin
Impact of Home Literacy Practices on English Language Learners

Emily Curry
Fixing Giftedness: How a Broken System Can Be Improved
Rachel Dumas
How Movement Affects the Classroom

Whitney Gallimore
Elementary Service-Learning: Application in the Classroom

Charlotte Grace
Improving Writing Instruction for Students with Intellectual or Learning Disabilities

Sarah Howard
Creating Global Citizens in the Elementary Classroom

Kaileigh Leavy
Motivating Female Students against Negative Biases

Erin Long
How to Culturally Enrich the Classroom

Emily McGinn
Classroom Management Strategies: How to Create an Effective Learning Environment

Maeve McNew
The Positive Effects of Equine-Assisted Activities on Students with Autism Spectrum Disorder

Noelle Morabito
Changing the Learning Ratio: Why Small Group Instruction Works

Kate Ohlwein
Writing Workshops

Ashley Osborne
Successfully Implementing Alternative Assessments

Jenna Premo
How Do Teachers Motivate “Average” Readers to Become Great Readers in Third Grade

Maci Reed
Reading Motivation

Katherine M. Shilling
Gender Differentiation in Schools

Kaylynn Sorensen
The Use of Specialized Therapy Strategies for Dyslexic Readers in the Classroom
Kristyn Stetson
Selective Mutism: Ending the Silence through Schools

Allison White
The Influences of Art and Music

Danika Yoder
The Effects of Music Therapy on Students with Disabilities

Victoria Alexis Aldea
A Maculate Misconception: Re-Visioning the Female Virginity Myth

Elizabeth Grace Bevin
The Proto-Feminism of the Brontë Sisters

Abigail Elisabeth Bush
Two Jataka Tales: A Comparison across Schools of Buddhism

Jill Crotty
Small Fish, Big Pond: An Analysis of Trends in the Independent Book Publishing Industry

Mara Egan
*The Beautiful Part*, a screenplay; with A Reflection on Contemporary Coming-of-Age Stories, Heterotopias and American Identity

Michael Allan Galvez
*Starfall*, with a critical commentary on story, character, and multidimensional travel

Alexa Danielle Grohowski
"Mono No Aware“: Nature and Aesthetics in Kawabata’s *Snow Country*

Jackie Marie Guerin
Wands, War, and Worry: How Coping Mechanisms Are Created through Reading

Elizabeth Anne Hutchison
“Just to Finally Feel Good about Myself”: An Analysis of Lesbian Coming–Out Narratives

Jake William Moore
"Thise been the cokkes wordes": A Bakhtinian Reading of Genre in “The Nun’s Priest’s Tale”

Nicole Jacqueline Padgett
*Alterspace*
Chyina Shantel Powell
Stereotypical Re-Presentations of Black Women in Literature and their Impact on Readers

Sarah Elizabeth Shahnovsky
Not by Accident: Generational Normalization through Serial Killers

Alexandra Marie Shimalla
INKED: How Tattoos Tell Stories

Leah Rae Smith
“There’s Just Me!”: The Gradual Loss of the Mask and Secret Identity in Superhero Comics

Rachel A. Street
When Reality and Fiction Collide: Representations of Canadian Culture and Personal History in the Work of Margaret Laurence

Haley Nicole Thomas
East Meets West: An Analysis of Kyung-Sook Shin’s Please Look after Mom

Caroline Grace Williams
Rescuing Austen: A Stern Evaluation of Contemporary Spin-offs, Parodies, and Fanfiction

Riley Robson Woods
When We Vacation It Is to Museums

Isaach William Velasco
From Pacifism to Militancy: A Rhetorical Analysis of the Weather Underground with a Concentration on the Recruitment Strategies and Motivational Factors of Fringe Organizations

BS-Environmental Science

Stephanos Alichos
The Effect of Bidens alba Seed Density on the Germination of Three Native Sandhill Species

Justin Baumann
Geospatial Applications of Proximity vs. Connectivity: A Multidimensional Analysis of Food Deserts within Deland, Florida

Miranda Camp
A case study in Discovery Bay, Jamaica: Depletion of Jamaican Fisheries Leads to Rise in Diving Injuries, Emphasizing the Critical Need for New Fisheries Management
Benjamin Chase
Do Ecological Succession and Invasive Plants Pose a Threat to Biodiversity in Iceberg Point, Lopez Island, Washington?

Alex C. Clark
Using Harvested *Pistia stratiotes* and *Eichhornia crassipes* Based Compost as a Solution to the Excessive Use of Inorganic Fertilizer in Central Florida

Jordan Madio
Nutrient and Coliform Bacterial Concentrations in Storm Water Systems in Relation to Varying Septic Tank Density in Volusia County, Florida

Tabitha Petri
The Effect of Soil Fauna on the Growth of *Liatris tenuifolia* in a Restoration Sandhill Site

Daylan Ware
Analyzing Conservation Land Use: Can Conservation Land in Volusia County Be Developed without an Adverse Effect on the Environment?

**BA-Environmental Studies**

Aidan Bandy
An Evaluation of the Costs and Benefits of Implementing Corporate Sustainability Values for West Marine

Kathryn Nathenson
The Hetch Hetchy: Environmental Controversy in the Past and in the Present

Stefanie A. Perosa
A Historical and Contemporary Analysis of the Dialectical Relationship between Environmental Art and Environmental Movements from 1960 to the Present

**French**

Michelle Angel
Le préjugé transatlantique: Analyse comparative de l'évaluation de l'art américain et Français depuis le XVIIIe siècle / Transatlantic Bias: a Contrastive Analysis of the Appreciation of French and American Art since the 18th Century
Andrea Bruere  
Je t’aime un peu, beaucoup, pas du tout: étude du sentiment d’appartenance de la jeunesse française musulmane d’origine étrangère / Love Me, Love Me Not: a Study of the Sense of Belonging of Second Generation Muslim French Youth

General Studies in Education

Thomas R. Ecker  
Comics in the Classroom

Rachel E. Hart  
Engaging ADHD/ Hyperactive Students

Brooke A. Henriques  
Positive and Negative Learning Environments: Knowing the Difference and How They Affect Students’ Way of Learning

Paige Jagel  
How Can Teachers Eliminate Gender Bias in the Classroom?

Thomas P. Jamieson  
Self-Efficacy Beliefs and Students’ Academic Performance

Autumn Matthews  
Learning Styles and Multiple Intelligences: How They Affect Teaching and Learning

Ansley M. McCaughey  
Gender Studies: Boys’ Single Gender Classroom and the Behavioral Effects

Mary K. O’Sullivan  
Differentiating Instruction: Do Learning Styles and Gender Matter?

Megan C. Vaughn  
Does Readers Theater Improve Students’ Fluency in the Classroom?

William E. Walsh  
Drug Testing High School Student Athletes
Laurel Rotolante  
Childhood Violence and Its Repercussions in Peter Hanneke's *The White Ribbon*

**German**

History

Justin Pierre Baumann
Jewish Assets in Swiss Banks: 1933-2014

Elizabeth Bevin
The Proto-Feminism of the Bronte Sisters: Charlotte and Emily

Cameron Black
The Ultimate Assist: Expansion, Salary Growth, and ‘Cultural’ Changes within the National Basketball Association from 1970-2000

Christina Clancy Canalizo

Griffin Fuller
Sir Francis Drake: Revolutionary of the Pirate

Athena Jeanne Hale

Peter Lubas
The Marshall Plan: Germany, Austria and U.S. Soft Power

Kathryn Nathenson
The Hetch Hetchy Valley: The Failure of U.S. Water Policy

Jake Pequignot
The Life of Themistocles: A Class issue in an Ostensibly Democratic Athens

Matthew Alexander Rafferty
Building Belfast: Historical Memory and the Titanic Belfast Museum

Drew Smith-Denston
Grey State: How Florida Aided the Confederacy during the American Civil War
Idalis Vento  
Challenging Gender Roles and Ideas of Femininity: The Women’s Army Corps during World War II

Madeline Ryan Welsh  
The Johns Committee, 1956-1965: Maintaining the Social Status Quo and Controlling Education under the Guise of Fighting Communism in Florida

**Humanities**

Andrew Aldrich  
Write Drunk, Edit Sober: A Rhetorical Study of American Authors Using Bar Culture as Their Third Space

Alexa Drost  
Art Evolutionism

Myles Marken  
The Archetypal Achilles

Emma Mazzone  
The Impact of Art in the Oppressed Community

Angelo Parkinson  
A Humanistic Approach to Free Spirits

Bria Parrish  
Decorative, Invisible, One Dimensional, Evil, but Rarely the Hero: Black Actors’ and Actresses’ Struggles to be Seen Positively in American Action Cinema

Paxton Reil  
Wales: A Hidden Resource of Classical Music

Bailey Rosin  
What do you really destroy when you destroy graffiti?

**Integrative Health Science**

Glenn Adesoji  
Health Related Behaviors among School Age Children
Justin Baggs  
Public Health Needs Assessment of Spring Hill Community

Sean Berringer  
Hemodynamic Effects of Beetroot with Submaximal Exercise in Older Persons

Tyler Bowling  
Public Health Needs Assessment of Spring Hill Community

Emily Carey  
Public Health Needs Assessment of Spring Hill Community

Audrey Cherin  
Lung Cancer Hospitalization and Mortality in Volusia, 2010-2014: A County and Sub-County Overview of Death Rates and Financial Costs of Hospitalizations

Jessica Cosgrove  
Kinematic Effects of Maximalist Running Shoes

Adrienne DeVita  
Gender Differences in Physical Activity and Related Beliefs among Adults Participating in YMCA Programs

Evann Dickerson  
Hemodynamic, Metabolic, and Perceived Exertion Effects of Beetroot with Submaximal Exercise in Older Persons

Dominique Drager  
Alcohol Related Events in Volusia County Using Population Health Data, 2010-2014

Meghan DuMond  
Review of Complementary and Alternative Type II Diabetes Therapies

Zachary Dyer  
Gender Differences in Physical Activity and Related Beliefs among Adults Participating in YMCA Programs

Gregory Fernandez  
Public Health Needs Assessment of Spring Hill Community

Megan Harmon  
Health Related Behaviors among School Age Children

Megan Harvey  
The Association between Genital Hygiene Practices and Urinary and Reproductive Tract Infections
Alexandria Hodgins
Hemodynamic and Cognitive Effects of Beetroot in Intercollegiate Women Soccer Players

Joshua Isacco
Functional Mobility and Cognition-Based Effects of Tai Chi and Balance Training in Older Persons with Cognitive Decline

Marc Kagan
Kinetic Effects of Maximalist Running Shoes

Michelle Kastner
Cardiovascular Effects of Beetroot with Submaximal Exercise in Older Persons

Mara Keomanivane
Cognitive Effects of Beetroot with Submaximal Exercise in Older Persons

Amber Kinney
Hemodynamic and Cognitive Effects of Beetroot in Intercollegiate Women Soccer Players

Rachel Lee
Alcohol Related Events in Volusia County Using Population Health Data, 2010-2014

Makeshia Lucien
Cognitive Effects of Beetroot with Submaximal Exercise in Older Persons

Matthew Mines
Functional Mobility and Cognition-Based Effects of Tai Chi and Balance Training in Older Persons with Cognitive Decline

Keisha Nauth
Gender Differences in Health Related Behaviors among College Students

Andrea Ortega
Gender Differences and Related Beliefs Associated with Binge Drinking and Physical Fitness among College Students

Ana Perez
Evaluation of Knowledge Verses Attitudes on Nutrition among NCAA Division I Athletes: A Gender Comparative Analysis

Carolina Perez-Tobon
Public Health Needs Assessment of Spring Hill Community

Jacqueline Pollack
Public Health Needs Assessment of Spring Hill Community
Agustin Quintana
Review of Complementary and Alternative Type II Diabetes Therapies

Andrew Read
Functional Mobility and Cognition-Based Effects of Tai Chi and Balance Training in Older Persons with Cognitive Decline

Maggie Rought
Public Health Needs Assessment of Spring Hill Community

Erica Schneider
Should Universities and Colleges Require the Flu Shot? An Investigative Study on the Prevalence of the Flu on College Campuses

Jada Scott
Public Health Needs Assessment of Spring Hill Community

Nicholas Smith
Kinematic Effects of Maximalist Running Shoes

Keegan Tanner
Gender Differences in Physical Activity and Related Beliefs among Adults Participating in YMCA Programs

Marcini Thomas
Kinetic Effects of Maximalist Running Shoes

Alexander Valentin
Kinematic Effects of Maximalist Running Shoes

Anna Viens
Cardiovascular Effects of Beetroot with Submaximal Exercise in Older Persons

Fidel Vazquez
Lung Cancer Hospitalization and Mortality in Volusia, 2010-2014: A County and Sub-County Overview of Death Rates and Financial Costs of Hospitalizations

Austin Waldron
Health Related Behaviors among School Age Children

Lucille Williams-Fernandez
Gender Differences in Health Related Behaviors among College Students

Laurny Yost
Hemodynamic and Cognitive Effects of Beetroot in Intercollegiate Women Soccer Players
Brittany Zwerver  
Public Health Needs Assessment of Spring Hill Community

**International Studies**

**Austin James Jerome Brown**  
Influences of the Oil Cartel

**Tiana Trisha Caraballo**  
The Cost of Economic Policy in Brazil

**Chloe Kathleen Hill**  
Development in the Field of International Human Rights: An Examination of the Motivating Factors behind National Ratification of International Human Rights Treaties

**Corina Mercado**  
Corrupt Enforcement: Understanding Human Trafficking Rates in Central and South America

**Mathematics**

**Sheila Bonnough**  
Perturbation Theory Applied to a Time Dependent Non-Linear Damped Harmonics Oscillator

**Kathryn Coulter**  
Tracking the Untrackable: A Social Network Analysis Approach to Investigate ISIS's Recruitment Techniques Using Twitter Data

**Dipti Kothari**  
Portfolio Optimization Using Linear and Non-Linear Programming

**Nicole Navarro**  
Portfolio Optimization Using Alternative Risk Constraints

**Jeremy Szitas**  
Hurricane Simulation Using Markov Chains: Florida’s Risk
Gabriella Warrensford
A Model of Nutrient Flow in an Aquaponics System Using Diffusion-Advection-Reaction Equations

Thomas Wright
Game Development for an Augmented Reality System

**Molecular Biology**

Shelby Curren
Comparison of Genistein-Induced Cell Death in T-cell Leukemia Jurkat and Nonmalignant Lung Fibroblast MRC-5 Cells

Sara Davidovich
Effect of Land use and Nutrient Concentration on Population Density of Siltsnails (*Floridobia* spp.)

Stetson DeMartino
The Effect of Atrazine on the Embryological Development of Zebrafish

Khaled Eldeeb
Prey Induced Caudal Luring Behavior in Neonate Pigmy Rattlesnakes

Eduardo Lopez
The effects of Triclosan on Embryonic Development of *Ambystoma mexicanum*

Alexandra Lyubimova
Fewer Activated Neurons in the Hippocampus of Rats Exposed to a High Fat and Refined Sugar Diet

Kelsey McCurdy
Cortical and Behavioral Responses to NaCl in Rats

Brittany Peterson
Determining the Optimal Phosphate/Nitrate Ratios and Growth Conditions of *Cylindrospermopsis raciborskii*

Hannah Vansumeren
Local Adaptation in Pigmy Rattlesnake Venom Lethality

**Philosophy**

Lissette Conty
Love Is a Choice
Hannah Dean
Toward an Inclusive Ethic or Difference

Rebecca Luke
The Current Understanding of Sex is Not Biological: Debunking the Myths of the Sex Dichotomy

Tatiana Lyne
The Accessibility of Philosophy: Plato’s Critique of Poetry

Angelo Parkinson
A Humanitarian Approach to Free Spirits

Cole Simpson
The Culture Industry: An Illusion of Authenticity

Applied Physics

Erin Marie Foster
Measuring Gamma Ray Production from Positron Annihilation in Na-22

Physics

Sheila Wolin Bonnough
Speed of Light Measured by Timing Transits of Jupiter’s Moon Io

Joshua Kenneth Geary
Determining the Parameters for Successful Sonoluminescence

Michael Mohney
Wavelength-Dependent Efficiencies of Commercial Solar Panels

Philip Roddenberry
Measuring Ferromagnetic Hysteresis Loops Using a Vibrating Sample Magnetometer

Zachary Davis Rosson
Orbital Behavior around a Non-Uniform Celestial Body
La'Quisha Keotha Bell
Personalization of Politics: Does Personality Affect Vote Choice?

Aaron Oakley-Stanley Bibbee
The Leviathan Lurks in the Congo: How the Social Contract Impacts Conflict Resolution in Africa

Joseph S. Calascibetta

Dalton Kyle Clark
A Cross-Comparative Analysis of Political Trust and Confidence

John Coniglio
You Can’t Cut the Cake and Serve it Too: John Rawls and His Theory of Justice

Kathryn Victoria Coulter
Tracking the Untrackable: A Social Network Text Analysis Approach to Investigate the ISIS Twitter Network as Time-Dependent Networks

Ashley Marie del Cid
American Exceptionalism: The Institutional and Cultural Explanations for Hyper-Incarceration in the United States

Alexis Maria Ercolani
How the Elite Nature of the Supreme Court Influences the Public Agenda over the Course of Time

Hannah Fageeh
Tunisia, Egypt, and Syria of the Arab Spring: A Feminist Political Critique of Efforts to End Violence against Women

Andrew Tyler Feldman
America’s Defense Spending: How the Military Influences the Economy

Kaley Fulton
Preventing Radicalization: Civil Society and Political Representation as Tools for Preventing Violence and Terrorism among Islamist Organizations
Devon J. Hoffman
Democratization: How, Why or Why Not?

Daniel Logan Humphrey
Do Actions Speak Louder than Words? What’s More Important, Ideals or Money?

Peter John Lubas
Soft Power and the Marshall Plan in Germany and Austria

Daniel James O'Brien
Private Prisons and the War on Drugs: Assessing the Link through Campaign Finance

Miguel Angel Ortiz Burgos
The Politics of Public Education Funding in the United States

Christopher Michael Peer
Why is China’s Economic Rate of Growth Slowing?

Damely Teresa Perez
Let’s Talk Nationalism: Rhetoric for Power and Political Legitimacy

Brandi Nicole Pittman
The Effect of State Level Public Opinion on Federal Spending for SNAP

Krystal Rose Pruet-Lantz
Why Women Do Not Run or Win Elections

David Logan Reid
A Comparison of Political Ideology and Party Id across Time

Jacob Guy Sapp
Cross National Support for Same Sex Marriage: Building a Predictive Model of Change

Dawson Jack Shuman
The Tip of the Spear: A Discussion of Extrajudicial Assassination by the United States Government and Unmanned Aerial Vehicles in the Global War on Terror

Tyler Thomas Sims
Over Criminalization and the Public Perceptions of the Rule of Law
Daniel Urena
Long Sentences as the Path to “Law and Order”: The Rise and Stall of “Tough on Crime”

Isaach William Velasco
From Pacifism to Militancy: A Rhetorical Analysis of the Weather Underground with a Concentration on the Recruitment Strategies and Motivational Factors of Fringe Organizations

Lydia Virginia Walsh
When a Single Vote Counts: The relationship between Judicial Activism and the Increase in 5-4 Decisions.

Brooke Lauren Wickham
The Case of Midterm Elections and the Development of Party Identification

Psychology

Megan Angulo
Student Involvement and Its Effects on Academic Success and Altruistic Actions

Kali Ballard
The Relationship between Health Behaviors and Self-Esteem

Dixon Barnes
The Relationship between Social Self-Efficacy and Levels of Extraversion and Introversion in College Students’ Emotional Intelligence

Hayley Danielle Barr
Aggression in Hypothalamic-Lesioned Norway Rats

Alexia Nicole Beauregard
The Relationship between Prior Traumatic Events and Future Risk Perception

Kira Bell
The Intersection between Sexuality and Dreaming: How Daytime Sexual Activities and Attitudes Relate to Content of Sexual Dreams

Dalles Raydell Black
Music and Stress: How the Use of Musical Instruments Relates to Stress in the College Environment

Sheila Wolin Bonnough
The Interaction Effect of Facial and Vocal Attraction on Perceived Overall Attraction
Ilana Brodzki
Are Body Image Ideals Shifting to a Lean Body Type? A Study on Body Ideals in Men and Women

Cassidy Cameron
The Relationship between Active and Passive Internet Use and Depression and Anxiety

Ariana Marie Canosa
Authoritative Parenting as the Optimal Parental Style: Prediction of Satisfaction, Optimism, and Academic Achievement in College Students

Maria Juliana Casado
Academic Stress and Its Relationship with College Students’ Eating Behaviors

Christina Chamberlin
Gender Studies Curriculum: Changing Students’ Attitudes and Creating Potential Prejudice towards Men and Women

Elisabeth Cleek
The Effects of Group Study and Personality on Learning Nonsense Words

Kay Maria Colon-Motas
Is your Parents’ Relationship Affecting Yours? The Influence of Parental Infidelity and Attachment Style on Love Beliefs in Romantic Relationships in Young Adults

Haley Lauren Corbett
Does Having a Growth Mindset Lead to Greater Persistence without External Reward?

Mary Dreggors
The Effect of Confidence and Stereotype Threat on Women’s Performance of a Motor Skill Task

Erica Christine Eddy
Birth Order and Its Effect on Perceived Narcissistic Personality Traits

Ashley Edwards
The Importance of Gender Specific Nudity and Its Effects on Body Image and Self-Esteem in Undergraduate Students

Brittany Egan
College Students’ Facebook Use: What are the Motivations and Consequences?

Francina L. Elien

Monica Alejandra Escobar
Attaching to Fandom: A Study in Pop Culture Sensationalism
Melanie Jade Estrada
Sibling Relationships and Future Adult Romantic Relationship Quality

Rachel Madeleine Filson
Childhood Physical Punishment’s Effects on Emotional and Social Characteristics in Adulthood

Amber Finnicum-Simmons
Motivations, Gains, and Barriers to Community Volunteering by College Students

Sophie Louise Fisher
“Hey Baby, I’m All about Your Bass”: The Effects of Catcalling on Women’s State Body Image and Self-Objectification

Brianna Marie Fisher
Self-Rated Peer Acceptance in Relationship to the Sexual Double Standard

Jessica Griffin
Influence of Intellectual and Physical Factors on Student Athletes’ Self Esteem

Trevor James Guy
The Effects of Music in Advertisement and Information Retention

Jori Nichole Henry
How Religiosity and Ambivalent Sexism Relate to Relative Mood

Alan Michael Hinderleider
I Am “100% Sure” I Am Being Manipulated: How Semantics, Framing, and Perception Influence Confidence Estimates

Kyle Jay Jackman
Pre-Service Teachers at Stetson University: Readiness, Perceptions, and Biases towards Special Education, with a Focus on Inclusive Classrooms

Nicholas Randolph Kaplan
Psychosocial Correlates of Yik Yak Use

Christina Michelle Koontz
The Relationship between Self-Control and Healthy Eating Behaviors

Charles Elliott Lane
Brainwave Entrainment vs. Meditation: Which Method Enhances Cognitive Processing Most Efficiently?

Kristin Lasky
Text Messaging Impact on Emotional Intimacy in Relationships
Kasandra Leclair  
Talking to Strangers: Effects of Facial Recognition on the Five Traits of Personality

Paige Levesque  
Pornography Use and Its Relationship with Attitudes towards Women and Men

Jozefina Logu  
Effectiveness of a Video on Attitudes and Perceptions towards Female Condom Use

Brooke Lacie Lohmann  
The Relationship of Socio-Economic Status to Mental Health and Academic Success in College Students

Ellie Catherine Macchione  
The Effects of Dialect Familiarity on Word Recall and Memory

Wayles Nottingham Martin  
The Relationship between Birth Order, Personality, and Religiosity

Delaney Meghan McMann  
Sympathetic Nervous System Suppression via Inhalation of Lavandula angustifolia in College Students

Stephanie Ann Miller  
“But What about Me?” Coping Strategy Differences among Bereaved Adults after Parental Death

Jasmine Nicole Moore  
The Relationship between Violent Television, Psychopathic Characteristics, and Empathy

Anna Catherine Payne  
The Effects of Information Delivery on Perceptions of Campus Safety

Danielle Jade Phillpotts-Brown  
The Relationship between Worry, Injury Recovery, and Risk Perception in Student Athletes

Callan Piazza  
The Effect of Pet Ownership on College Student Well-being, Academic Performance, and Campus Involvement

Justin Reynolds  
The Relationship between Sex, Anxiety, and Coping Mechanisms among Traditional College Undergraduates

Madison Lee Riege  
Using Dogs as a Tool for Stress Reduction in College Students
Isabella Beatriz Riera
Effects of Binaural Beats on Performance during Neurofeedback Training

Victoria del Carmen Riera
The Relationship between Injury, Self-Efficacy, Sports Confidence, and Fitness among College Undergraduates

Nicole Rivera-Montanez
The Effects of Presentation Modality and Meaningfulness on Memory Recall

Nicole Rose Rodriguez
Relation between Video Gaming and Factors Associated with Academic Success in College

Koryn Sierra Rooney-Walters
One Night and One More Time: Attitudes of Hook Up and Casual Sex Culture among Young Adults

Natalia Ruiz-Nardone
An Experimental Study of How Media Images Affect Women’s Body Self-Esteem

Nicholas Serraes
College Exposure and Its Relationship with Religious Worldviews in Emerging Adults

Savannah Castleberry Shamrock
Anxiety, Depression, and the Satisfaction of One's Religiosity

Molly Love Shasteen
The Relationship between Self-Esteem and Sport Superstitions

Cameron James Spanogle
The Influence of Mood in Advertising on the Creation of False Memories

Jennifer Stone
Too Many Choices, Too Many Things: The Impact of Excess on Humans’ Stress Levels

Shelby Ruth Varner
How Competiveness and Perceptions of Psychological Momentum Affect Effort

Chan'tia Vincentia Vasquez
Looking at the Black, White, and Shades of Gray within Morality

Stephanie Elaine Vazquez
Learned Helplessness and Help-Seeking for Mental Health Disorders among College Students

Victoria L. Vola
It’s all about the Music: How the Emotions Provoked by Music Influence the Perceptions of Films
Kaitlin Deska Wagner
Perceptions of Sexy Women in the Workplace

Charlotte Anna Warta
Do My Relationships Make Me Look Fat? The Relationship between Body Image and Verbal Commentary from Friends and Significant Others

Erin Webb
The Effect of Personality and Crypsis on the Shoaling Tendencies of *Lucania parva* and *Lucania goodle*

James Stewart Welch III
Self-Concept Clarity and the Decision to Go Greek

Mark Anthony Williams
Perspective-Taking versus Education for Reduction of Bias towards Convicted Minors

Delaney Elizabeth Willis
The Effects of Lighting and Word Choice on Puzzle-Solving Abilities

---

**Religious Studies**

Rachel Asbury
The Venerated Goddess and Denigrated Woman: A Revelation of a Clandestine Acknowledgement of Feminine Power

Bianca Barreto
Theological Themes of Contemporary Christian Music in Pentecostal Churches

Elias Beates
Soccer and Religion

Abigail Bush
Two Jataka Tales: A Comparison across Schools of Buddhism

Steven Cassell
Earth or Fire: Burial Practice of Jehovah’s Witnesses in South Brooksville

Zachary Evans
Christianity, Mother Nature, and Salvation for All

Erin Hendryx
God’s Green Earth: Christianity and the Preservation of Nature
David Eric House
Pushing the Patriarchy: A Feminist Analysis of Domestic Violence in Islam

Victoria Languzzi
The National Motto “In God We Trust” in Regards to the Establishment Clause

Jacob Sapp
Cross National Support for Same Sex Marriage (Building a Predictive Model of Change)

Michael Sarracino
Angels in American Religion

Nicholas Serraes
College Exposure and Its Relationship with Religious Worldviews in Emerging Adults

**Russian, East European, and Eurasian Studies**

Maxwell Droznin
A Systematic Review of Multi Drug-Resistant Tuberculosis in Prisons of Post-Soviet States

Neri Ordaz
Disease in Former Soviet Union Republics: An Economic Analysis of Dutch Disease in Oil-Rich Azerbaijan, Kazakhstan and Russia

**Social Science**

Harrison Angelis
Can Social Media Predict Elections?

**Social Science-Secondary Education**

David Hughes
Mis-Educated: The Legacy of Carter G. Woodson and the Indoctrination of African-American Students

Sarah Lipsitz
Teacher Preparation: An Analysis of the United States vs. Finland, Canada, and Singapore
**Sociology**

**Michelle Brown**  
Tattoos and Public Perception: A Quantitative Study on the Prevalence of Body Art Stigma in the Workplace

**Danitra Calderon**  
"If We're Talkin' Body, You Got a Perfect One": A Study of Media Influence on Stetson University Female Undergraduate Students' Body Image Satisfaction

**Taylor Grayson**  
Race and the Catwalk: A Content Analysis of High-End Designer Brand Runway Lineups

**Brittany Hawn**  
Aloha Hawaii: A Qualitative Study on the Authenticity of the Hawaiian Culture and the Effect of Age on Native Hawaiian Resistance to American Colonization

**Sabrina Lemar**  
The Correlation between the Durations and Frequency of Television, Group Belonging, and Prosocial Dimensions

**Patrice Perkins**  
“Acting Black” vs. “Acting White”: Mixed Methods of Perceived Racial Social Roles

**Victoria Tomkinson**  
A Mixed-Methods Examination of the Risks and Rewards of Being a Female in a Sexualized Work Environment

---

**Spanish**

**Jillian Curtis**  
Breaking the Mold: Changing Common Generalizations about Mexican Family Businesses, a Case Study

**Mia Gorkowski**  
Memoria y Olvido: The Spanish Civil War in Film

---

**Theatre Arts**

**Brenna Burgess**  
The Theatre and Education Collaboration
Alexandra Champagne
Director of The Effect of Gamma Rays on Man-in-the-Moon Marigolds

Kerry Lynch
Performing as Belise in Moliere’s The Learned Ladies

Amelia Vaughan
Performing as Philaminte in Moliere’s The Learned Ladies

Michael Allan Galvez
Director and Screenwriter for “Starfall: A Reality Immersion Experience”