The University of West Florida

Student Scholars Symposium
"A Celebration of Ideas"

April 21, 2011
We would like to thank the following sponsors for the event:
Office of the President, Office of the Provost, Office of Research and Sponsored Programs, College of Arts and Sciences, College of Business, College of Professional Studies, Archaeology Institute, Honors Program, Sam’s Club, Techsoft, iSpace.net and Phi Kappa Phi.

We gratefully acknowledge the Office of Undergraduate Research Advisory and the Scholarly and Creative Activities Committees for their dedicated service in support of UWF’s research mission.

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Kathleen Heubach
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Richard Podemski

We thank the departmental representatives who reviewed abstracts for the Symposium:

Ramie Gougeon
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Karen Prichard
Karen Molek
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Laszlo Ujj
Sherry Schneider
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Carol Tanksley

Additionally, we thank our volunteer judges and Dr. Jocelyn Evans for coordinating the symposium awards.

Symposium graphic design and program layout by Aaron Smith, Communication Arts major.
Welcome

Dear Student Scholars,

I am delighted to welcome you today and I congratulate you on your academic achievement. The University of West Florida has a proud tradition of student involvement in scholarly endeavors. Thus, this symposium is designed so that we can celebrate your accomplishments and you can demonstrate your learning and expertise.

I wish you the very best of luck with your continued academic pursuits. The University of West Florida is proud of your hard work and energy. Enjoy the symposium.

Sincerely,

Judith A. Bense, Ph.D.
President

I am so pleased to welcome the many student participants to the first annual Spring Student Scholars Symposium, sponsored by the Office of Undergraduate Research, the Office of Research and Sponsored Programs and the Graduate School. This unique event provides an opportunity for both graduate and undergraduate students from the College of Arts and Sciences, the College of Business and the College of Professional Studies to be recognized for their scholarly and creative work by fellow students, the faculty and others. I wish all of the student participants the best of luck!

Chula King Ph.D.
Provost
Welcome to the UWF’s Student Scholars Symposium! I want to congratulate those students participating in this year’s program which highlights the best in scholarly and creative works produced through collaboration between students and faculty. Building on the success of SEASTARS, this year we have over 112 presentations across 24 departments from all three colleges.

Last fall, the Office of Undergraduate Research was created to support undergraduate student engagement in research and scholarly activities across all disciplines. The Office facilitates collaboration between students and faculty through funding and administrative support for undergraduate scholarly work. Highlighted in this program are those students whose projects received support from the OUR, including many students who were able to present their research at regional and national conferences this year.

Join me in celebrating the wonderful achievements of our students!

Dr. Pam Vaughan
Director, Office of Undergraduate Research

Applied research is integral to UWF’s core mission. The Graduate School and the Office of Research and Sponsored Programs are excited to co-sponsor the inaugural Student Scholar Symposium. This is an exciting opportunity to celebrate the accomplishments of our undergraduate and graduate students as they showcase their research.

We owe a special acknowledgement to our faculty who foster a love for research in the classroom and laboratory and mentor students to become researchers themselves. Many of the presentations at today’s Symposium are the result of just such faculty-student collaborations. Congratulations to everyone who help to ensure the success of in this wonderful event.

Dr. Richard Podemski
Associate Vice President for Research
Dean of the Graduate School

On behalf of the University Honors Program, I’d like to welcome each and everyone of you to the UWF Student Scholars Symposium! The Honors Program has a long and deep history of supporting undergraduate research at The University of West Florida, and this Symposium is just one way we have of celebrating the great work of our wonderful students! I can’t tell you how proud I am of the cutting edge thought and ability that an exhibition like this shows; we are definitely living up to our promise to bring out the very, very best in our students. I hope you have an enjoyable and stimulating time!

Dr. Greg Lanier
Director of Honors

I’m delighted to offer my congratulations to all of the faculty and student scholars who have contributed to our very first Student Scholars Symposium. The College of Arts and Sciences has had a very successful spring scholarship tradition in SEASTARS and it is exciting to see the showcase opportunities spread so broadly.

I think occasions like this give us a real opportunity to remind ourselves about what makes UWF such a special place to learn and to work. Congratulations to Pam Vaughan and the hardworking committee that brought this event to its happy conclusion. Well done!

Dr. Jane Holonen
Dean of the College of Arts and Sciences

To all faculty and students participating in the University of West Florida’s first Student Scholars Symposium, I extend my congratulations. As a Dean, I feel very fortunate to be a part of an institution that fosters collaboration between faculty and students in educational pursuits. This symposium showcases the exceptional educational experience offered at UWF.

Sincerely,
Dr. Ed Ranelli
Dean of the College of Business

On behalf of the College of Professional Studies, it is my pleasure to recognize and honor the outstanding work of our students at the first Student Scholars Symposium. For those of you who will present your work at this symposium, I congratulate you on a job well-done. We encourage you to continue striving for the best in your studies and your careers. This symposium demonstrates the rewards of scholarship and intellectual endeavors, and shows how the dedication of our faculty can lead to wonderful opportunities for our students. We wish you all continued success.

Dr. Pamela Northrup
Dean of the College of Professional Studies
10:00 am - 2:30 pm: Open to public viewing

10:30 am - Field House Stage
Visual and Performing Arts
A Lesson in Love
Brandy Hooper    Jessica Benitez

11:00 am - Field House Stage
Visual and Performing Arts
Selected scene(s) from Moliere's comedy Tartuffe.
Nicole Dickson    Keegan Stull

11:30 am - Field House Stage
Visual and Performing Arts
Louder Than Words
James Mitchell    Leah Arington
Kate Bellone      Toni Bonaccorso
Ruben Diaz        Eris Finney
Rashawnda Foster  Chris Frazier
Lauren Johns      Savannah Simerly

11:45 am - 12:35 pm: Oral presentations in the HLS facility classrooms

11:45 am - 12:05 pm - Room 209
Camp Fire USA Public Relations Plan
Tiffany Elise McWilliams

11:45 am - 12:05 pm - Room 210
Gubernatorial Power in the Face of War
Rebekah Johansen

12:15 pm - 12:35 pm - Room 209
Rhetorical Criticism of the Exclusion of a Lane Bryant Commercial Ad
Kristen Rowland

12:15 pm - 12:35 pm - Room 210
Maternal Attachment Style and Family Interactions
Stacey Bass

12:00 pm - 1:00 pm: President’s Reception for Sponsors, Judges, and Volunteers
12:00 pm - 2:00 pm: BBQ club cookout for Participants and Students
12:30 pm: Phi Kappa Phi Induction Ceremony
1:30 pm: Phi Kappa Phi Reception for Members and their guests
2:00 pm: Awards Announcement
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Department Abbreviation Listings

ACC  Department of Accounting
ANT  Department of Anthropology
ART  Department of Art
BY   Department of Biology
CHM  Department of Chemistry
COM  Department of Communication Arts
CRJ  Department of Criminal Justice
ECO  Department of Economics
EH   Department of English
ELE  Department of Electrical Engineering
EVR  Department of Environmental Science
GOV  Department of Government
HIS  Department of History
HLP  Department of Health Leisure & Exercise Science
MAT  Department of Mathematics
MM   Department of Management MIS
MRB  Department of Marine Biology
PHI  Department of Philosophy
PHY  Department of Physics
PLA  Department of Justice Studies
POS  Department of Political Science
PSY  Department of Psychology
SS   Department of Computer Science
TA   Department of Theatre
Comparison of Age and Growth Rates of Red Snapper, Lutjanus campechanus, in the North-central Gulf of Mexico
Joshua T. Neece; William F. Patterson III; Joseph H. Tamecki

Efficiency of light sources for PMA activation to distinguish live vs. dead cells using qPCR
Elizabeth Kennedy; Karen Cravero; Kristen Hellein; Joe Eugene Lepo
OUR Funded

Hunting for a Tubby Homolog in Tribolium castaneum
Thomas Stephenson; Rainey Booth; Nicholas Spencer

Regional differences in age growth, and mortality of Gulf of Mexico gray triggerfish, Balistes capriscus
Carrie Fioramonti; Robert Allman; William Patterson

Coquina clams (Donax variabilis) as indicators of coastal hydrocarbon contamination
Christina Welch; Gracie Exline; Richard Snyder
OUR Funded

Detection of phosphoinositide-binding proteins in Tetrahymena vorax using liposomes as an affinity matrix
Thomas M. Yarbrough; Phillip E. Ryals
SCAC Funded

Effects of Lithium Chloride and Valproic Acid on Phospholipid Composition of Tetrahymena patula
An L. Lawrence; Phillip E. Ryals
SCAC Funded

The effects of lithium and valproic acid on protein phosphorylation in Tetrahymena patula
Katie C. Sprinkel; Phillip E. Ryals
SCAC Funded

Designing, Assembling and Integrating a High Vacuum System on a MALDI Reflectron-TOF MS
Georgia Boles; Jonathan Buttrick; Jessica Carter; Nickolas Zingaretti; Karen S. Molek
OUR Funded

Using ICP/MS to Determine the Efficiency of Metal Remediation Materials
Chelsie Beck; Maureen Bruins; Pamela Vaughan
OUR Funded, Honors Thesis

Polymerization of 3-Oxetanol
Cholena Russo; Mitra Vashi; Tim Royappa
SCAC Funded

Development of a method for the detectin of Polynuclear Aromatic Hydrocarbons in Coquina
Alexandra Vestal; Robert Pelot

Seasonal Patterns of Ultraviolet Photo-protective Pigments in Phytoplankton
Holly Prochazka; Kyrsten Mckeand; Sharon Blackwell; Jennifer Glancy; Victoria Singletary; Pamela Vaughan

Synthesis and Hydrogen Bonding Studies of New 9-Dipyrrinone Carboxylic Acid Derivatives
Dolan Dean; Stephani Spiegel; Luis Flores; Korry Barnes; Michael T Huggins
OUR Funded

Fluorescent detection of organophosphate chemical warfare agents
Deborah Barkley; Ian Walton; Michael T. Huggins
OUR Funded

Examination of Triclosan Photo-degradation with Varied Salinity and Organic Matter Content
Jareae Baptiste; Paulise Bruns; Amber McCarver; Pamela Vaughan

Florida’s Juvenile Justice System: Why are Children in Adult Prisons?
Mary K. Jones
OUR Funded; Honors Thesis

A Preliminary Analysis of Employment Opportunities for Offenders in Northwest Florida
Danielle Butler; Justin Flynn; Laura Groat; Brittany Hoyt; David Morrell; Amanda Tryling; Robert Zuchowski; Dr. Cheryl Swanson

Prevalence of Corn in Today’s Economy
Ruth Ashley; Tabatha Ducharme

Hardware/Software Interfacing of an Indoor Navigation System: Auto-pilot Reconnaissance Quad-Copter
Brandon Walker; Michel Starr
OUR Funded

ATLAS: All-Terrain Land Autonomous Scout
Kevin Denney; Joshua Mathis; Philip-Nadenbousch; Daniel Skrabac; Roman Tillman
OUR Funded

iRobot Create: Traffic Simulations
Joshua Davis; Michel Starr; Brandon Walker; Anton Yareko

Autonomous Research Suface Vessel
Anton Yareko; Alexander Keyhani

High-Speed Video Camera Frame-Rate Validation
Jarrod D Palmer; Ezzat Bakhoum
OUR Funded

Alternative Energy: Coast to Coast
Jessica Engel

Initial Changes in Soil Quality Characteristics due to the Adoption of Mob Grazing
Maureen Harrington
OUR Funded

Effect of Mob Grazing on Soil Quality
Hallie Johnson; Johan Liebens
OUR Funded

Multidecadal predictability in summer drought variability in the Southeastern United States
Ashley Weatherall; Dr. Jason Ortsgren
Honors Thesis

The Effects of Fire on Groundwater Chemistry
Stephen Schoen; Dr. Matthew Schwartz
OUR Funded

Groundwater Nutrient Variability and the Implications of its Discharge
Mike Koban
SCAC Funded

Seasonal Variation of Groundwater Discharge and Groundwater Nutrient Inputs of Western Escambia Bay
Dawn Prince
SCAC Funded

Examination of Longleaf Pine Savannah Restoration on the University of West Florida and Suggestions
David Lee; Jason Ortsgren
<table>
<thead>
<tr>
<th>Page</th>
<th>Department</th>
<th>Title</th>
<th>Authors/Instructors</th>
</tr>
</thead>
<tbody>
<tr>
<td>49</td>
<td>GOV</td>
<td>“Devolution in the United Kingdom: Enhancing or Undermining the State?”</td>
<td>Jennifer Reid</td>
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<td>50</td>
<td>GOV</td>
<td>Civics Education: Comparing Public, Private and Home Settings</td>
<td>Mary Ann Johansen</td>
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<tr>
<td>51</td>
<td>GOV</td>
<td>The Federalist Debate within the European Union</td>
<td>Jennie Linder Cunningham</td>
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<tr>
<td>52</td>
<td>GOV</td>
<td>China’s Naval Security Strategy: Peaceful Rise or Looming Threat</td>
<td>Michael Trevathan</td>
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<tr>
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<td>GOV</td>
<td>The Politics of Defense Contracting: Assessing the changes from the 1990s to 2000s</td>
<td>William Nugent</td>
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<tr>
<td>54</td>
<td>GOV</td>
<td>Picking Your Battles: How Rational Litigants Shape the Political Landscape by Venue Shopping at the Federal District Court Level</td>
<td>Jessica Hayden</td>
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<td>55</td>
<td>GOV</td>
<td>The Deinstitutionalization of Congress</td>
<td>Jennifer Hobbs Fulmer</td>
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<td>56</td>
<td>GOV</td>
<td>Presidential Approval Rating in Response to Significant Events</td>
<td>David Hunter</td>
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<td>57</td>
<td>GOV</td>
<td>Preceding Judicial Decision-Making</td>
<td>Kyrsten B. York</td>
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<td>58</td>
<td>GOV</td>
<td>US House of Representatives’ District Size: Inverse Relationship</td>
<td>Matthew J. Schwalb</td>
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<td>59</td>
<td>HIS</td>
<td>Preserving Historic Foley: the Foley, Alabama, Historic District</td>
<td>Jonathan O’Neil; Adrea Watford; Allison Wolford</td>
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<td>HLP</td>
<td>Examining a Treatment for Survivors of Sexual Violence with PTSD Utilizing CBT and Aerobic Exercise</td>
<td>Erika Smith; Petra Schuler; Ludmila Cosio Lima; Robert Rotunda</td>
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<td>HLP</td>
<td>The Influence of Unconscious Needs on Hotel Brands</td>
<td>Jennifer Kelly; Xuan Tran</td>
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<td>HLP</td>
<td>Impact of Conscientiousness and Extroversion on Hotel Preferences</td>
<td>Jackie Lee; Xuan Tran</td>
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<td>63</td>
<td>MAT</td>
<td>Avoiding Partial Latin Square Simultaneously</td>
<td>Hannah Berry; Dr. Jarmoye Kuhl</td>
</tr>
<tr>
<td>64</td>
<td>MAT</td>
<td>Using MATLAB to Solve Real Symmetric Eigenvalue Problems</td>
<td>Tatsumi Tirado</td>
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<tr>
<td>65</td>
<td>MAT</td>
<td>The Finite Difference Methods for the Partial Differential Equations</td>
<td>Travis Dimming</td>
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<td>66</td>
<td>MAT</td>
<td>Representation of a flow: The Navier-Stokes equations</td>
<td>Megann Kirk</td>
</tr>
<tr>
<td>67</td>
<td>MRB</td>
<td>Differences in Northern Gulf of Mexico Reef Fish Size and Community Structure Before and After the Deepwater Horizon Oil Spill</td>
<td>Kaitlyn To bee; Joseph Tarnacki</td>
</tr>
<tr>
<td>68</td>
<td>MRB</td>
<td>Trophic Ecology and Population Dynamics of Tomate, Haemulun aurolinum, on the Northern Gulf of Mexico</td>
<td>Michacl J. Norberg; Joseph H. Tarnacki; Joshua T. Neese; William F. Patterson, III</td>
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<td>69</td>
<td>MRB</td>
<td>Analysis of the Donax (Mollusca: Bivalvia) populations post Deep-Horizon oil spill from Pensacola Beach and Perdido Key Beach, FL</td>
<td>Stephanie Witherspoon; Renee Davis; Rebecca Drake; Travis Theriault; Christopher Pomoney; Richard Snyder</td>
</tr>
<tr>
<td>70</td>
<td>PHI</td>
<td>“The Doctrine of Chance:” Why Pascal Made the Wager</td>
<td>Carter Johnson</td>
</tr>
<tr>
<td>71</td>
<td>PHY</td>
<td>Fluorescence of CdSe nanoparticles in the liquid crystal 8CB near the phase transitions</td>
<td>Jodie Gray; Shane Drye; Darren North; Tim Royappa; Laszlo Ujj; Chandra Prayaga</td>
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<tr>
<td>72</td>
<td>PHY</td>
<td>Nonlinear Dielectric Response of the Liquid Crystal 8CB Near Phase Transition</td>
<td>Hannah Buchanan; Dr. Chandra Prayaga; Dr. Laszlo Ujj; Lance Daley; Shane Drye; Tracy Lawson; Michael Koedell</td>
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<td>OUR Funded</td>
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<tr>
<td>73</td>
<td>PHY</td>
<td>Spectral Measurements of Fluorescence of CdSe nanoparticles in Liquid Crystals near Phase Transition</td>
<td>Samuel Beck; Jodie Gray; Darren North; Shane Drye; Dr. Chandra Prayaga; Dr. Timoy Royappa; Dr. Laszlo Ujj</td>
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<tr>
<td>74</td>
<td>PHY</td>
<td>Fluorescence decay of CdSe nanoparticles in Liquid Crystals near Phase Transitions</td>
<td>Darren North; Samuel Beck; Jodie Gray; Shane Drye; Dr. Chandra Prayaga; Dr. Laszlo Ujj; Dr. im Royappa</td>
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<tr>
<td>75</td>
<td>PHY</td>
<td>Automation of the Dielectric Characterization of Liquid Crystals</td>
<td>Shane Drye; Lance Daley; Hannah Buchanan; Dr. Chandra Prayaga; Dr. Josaphat Uvah</td>
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<td>OUR Funded</td>
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<tr>
<td>76</td>
<td>PHY</td>
<td>Development of a high-resolution quartz AC susceptometer for materials property investigation, research training and science education</td>
<td>Sean Heffern; Neil Baumann; Branwyn Holmes; William Nelson; Christopher Wackerly; Guoqing Wu</td>
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<td>OUR Funded</td>
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<td>77</td>
<td>PHY</td>
<td>Design of a Labview controlled automatic electrical resistivity measurement and data taken system for science research and education</td>
<td>Branwyn Holmes; Lena Ibrahim; William Nelson; Sean Heffern; Neil Baumann; Christopher Wackerly; Guoqing Wu</td>
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<td>78</td>
<td>PHY</td>
<td>The calculation of demagnetization field distribution in paramagnetic materials with spherical sample geometries</td>
<td>Christopher Wackerly; Sean Heffern; William Nelson;</td>
</tr>
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1. The Fight for Equal Footing in Tax Court: Attorney’s vs. CPA’s
Hillary Ryan
Department of Accounting
When the IRS finds tax deficiencies, the taxpayer has a right to dispute these deficiencies in the United States Tax Court. During the trial, representation of the taxpayer is limited to two groups: attorneys and non-attorneys. In 1942 admission to practice in front of the court was restricted to attorneys and those who can pass an examination written by the court. Certified Public Accountants (CPA’s), although having a sufficient background in tax, are not allowed to practice in front of the court without first passing this examination, a nearly impossible feat. This project defends the position that CPA’s should have the same rights to practice in front of the Tax Court as that of attorneys. The history of the Tax Court examination, the educational backgrounds of both CPA’s and attorneys, and the tax qualifications of each profession are looked at and scrutinized in order to defend this theory.

2. Cross Cultural Communications in a Clinical Environment: A common ground between anthropology and biological health sciences.
Charity Vander Wall
Department of Anthropology
First hand experiences from volunteer work in cross-cultural, satellite clinics in Central America is interpreted in reference to published literature on medical anthropology and common miscommunications that occur in cross-cultural settings. This poster provides a definition of medical anthropology, a description of the organization that runs the said satellite clinics, a summary of the ethnographic and clinical field work, and examples of observed miscommunications due to cultural differences.

3. Seafaring in the Ancient Mediterranean
Breanna Ifland
Department of Anthropology
Seafaring in the Eastern sub basins of the Mediterranean is one of the most understudied things from the dynamics of ancient culture. With the emergence of maritime activity in the Hellenic and the Roman era, a new subclass arose under the elite social class—sea merchants and mercenaries. The extended knowledge of nautical science and ship building introduced new trade routes and a faster means of exchange among countries, making it a promising career for many civilians. Raw materials were introduced to different regions and trading goods were bartered; the Mediterranean became the bridge to different regions— influencing a higher conquest rate, war, and acculturation. The expedited exchange from the sea merchants conducted a clashing of culture, ranging from religion representations, myths, marriage, patronage, and moral behavior. Seafaring became associated with the mystic and the unknown world of the Gods and various evils. Different practices and traditions were enforced to ensure a safe journey for the marines, as well as good fortune to the native country. Since, the career choice did not always guarantee a return, seafaring became held in high respect. Overall, maritime interactions had united the Mediterranean empires and formed one of the earliest modules of international relations.

4. Archaeology of Roatan
Capri Jazz Harvey
Department of Anthropology
Roatan, an island located off the coast of Honduras, has a culturally rich past with many important historical figures and events relating to the colonization of the new world. This includes occupations by Spanish, English, Caribs and pirates. Roatan’s large part in the interaction between islands in the Caribbean, leaves Roatan with a wealthy source of information about the beginning of Carribean settlement. Information that will be presented includes: a brief history of Roatan, the application of Geographic Information Systems (GIS) to understand Roatan’s history and place within the Caribbean sphere, and the review and analysis of archaeological reports about Roatan. The historical summary of Roatan consists of the geography of the island, economic factors such as food sources, occupational history, and myths and legends. By using GIS, I can spatially and visually show what historical documents reveal, which helps create a clearer picture of the historical development of Roatan and its interactions with other islands. Archaeological reports, as well as information from the Honduran Institute of Anthropology and History, give real archaeological and historical data to provide the best possible view of Roatan archaeologically.
5. An examination of potential mass burials within St. Michael’s Cemetery, Pensacola, FL. Nicole Roseneg Marshall
A. Joanne Curtin
Department of Anthropology
St. Michael’s Cemetery is the oldest extant cemetery in Pensacola Florida. Since 2000, anthropologists from the University of West Florida (UWF) have engaged in ongoing research at the cemetery aimed at documenting its use history. A total of 3,198 extant grave markers have been recorded, but historical records suggest that unmarked graves may also be present. A GPR survey conducted in 2008 identified 3,915 sub-surface anomalies that may represent unmarked burials. Several of these anomalies are significantly larger than would be expected for single interments, and possibly represent mass burials from colonial epidemic events. To test this hypothesis, the UWF Forensic Anthropology Field School conducted excavations at two of the large anomalies in the summers of 2009 and 2010. The goals of these excavations were: (1) to determine whether the sub-surface anomalies do indeed mark mass graves; and (2) to determine the chronology and ethnicity of any burials encountered and their associated artifacts. While neither of the first two anomalies excavated actually proved to be a mass grave, several individual unmarked graves were uncovered and documented. This presentation describes the results of the first two seasons of excavations at St. Michael’s and the human remains discovered to date.

6. Excavation of coffins from an underwater environment and embedded in a root mass
Stephanie Ward, A. Joanne Curtin
Department of Anthropology
In October 2011, coffins were found on Deadman’s Island, Florida. During an official search of the area, a hexagonal shaped root mass was observed floating in the intertidal zone. Nearby, more coffin shaped anomalies were located, which appeared to have been displaced by erosion from recent hurricanes. These anomalies were covered in a thick mass of dark roots and sediment and appeared to be coffin lids or bases. However, archaeological examination confirmed that they were not coffin lids but were collapsed coffins containing skeletal material. Excavations were performed on the coffins to determine how the combination of extreme root activity and water exposure affected the decomposition of human remains. Forensic and terrestrial archaeological field methods were used to excavate and condition the coffins. This presentation will document the recovery methods required to remove the skeletal material and artifacts from the root mass. The process revealed that although few bones remained intact, a solid mass of small roots defined their location and position. This unusual case will provide insight into the damage that exposed remains can do to a water environment and roots can do to human remains.

7. Raw Milk: For Pet Consumption Only?
Leigh Phillips, Natalie Trauday
Department of Biology
The USDA and FDA provide a compelling argument that pasteurization and homogenization processes of milk prevent pathogenic bacteria from entering the food supply. The increased nutrient density of the product provides greater health benefits than pasteurized milk. Proponents of raw milk suggest that the increased enzyme and nutrient density of the product can be utilized by the consumer. The debate over raw milk is not new. In 1870, the Wisconsin Department of Agriculture wrote a lengthy report in defense of raw milk. However, this report was not widely distributed or read. This presentation describes the results of the first two seasons of excavations at St. Michael’s and the human remains discovered to date.

8. Manipulating Microsoft’s Xbox Kinect
Daniel McNair
Department of Art
Microsoft’s Xbox Kinect is a motion and depth-sensing device, letting a user substitute his or her own body as a controller for the Xbox 360 video game console. Technically, the Kinect is a complex device combining an RGB video camera, a scanning infrared laser, an infrared camera, a motorized tilt mechanism, and an artificial intelligence-based recognition system. The most interesting aspect of this device is its infrared capabilities and the unique embedded imaging software that uses ‘depth map’ to perceive and identify objects in real time. Because this device uses a common USB port, it is possible to connect the module to a computer and build custom drivers and software that allows a user to use the kinect hardware for their own designs and applications. Prior to the release of this device, a person would have to invest thousands of dollars to accumulate the hardware and software to experiment in this field. Now that there is a single device being mass-produced, the ability to succeed in modifying and rebuilding this technology is tremendous. In my process of researching this subject, I look to develop a new and interesting interactive device that helps bridge a gap between humans and machines.

9. Differences in fish community and trophic structure at northern Gulf of Mexico natural versus artificial reefs
Tamecki, J.H., W.F. Patterson III, J.T. Neese
Department of Biology
Reef fish communities were sampled at natural (n = 24) and artificial (n = 26) reef sites in the northeastern Gulf of Mexico during 2009-10. Community structure was estimated from video samples collected with point-count or transect sampling conducted with a micro remotely operated vehicle that was equipped with a laser sea. Fish (n = 854) then were captured with hook and line, and otolith, stomach, and muscle tissue samples extracted from each individual. Community structure was significantly different between reef types (ANOSIM, p = 0.001), but not among depth strata (ANOSIM, p = 0.121). Fish community differences between habitats were driven by larger reef fish, including chaetodontids, labrids, pomacanthids, and tetraodontids, having higher densities on artificial reefs, while small planktivores and invertivores, such as apogonids, chaetodontids, labrids, priacanthids, pomacanthids, and tetraodontids had higher densities at natural reefs. Most fishes that co-occurred in natural and artificial habitats had similar size distributions between them, although amberjack were larger at artificial reefs and vermilion snapper and red porgy were larger at natural reefs. Red snapper (n = 468) growth rate was not significantly different between natural and artificial habitats (Likelihood Ratio Test, p = 0.624), and other co-occurring fishes also had similar size at age between habitat types. Stomach content analysis revealed few intraspecific differences in diet between habitat types, although stable isotope (δ13C, δ15N, δ34S) analysis of muscle samples indicates that fish fed at slightly higher trophic levels, and that their prey tended to be slightly more pelagic than benthic, on artificial reefs. Next, critical thermal maxima and minima were significantly correlated with acclimation temperature (p<0.001 in both species) and accounted for 95-98% of the variability in CTM. Gulf pikefish had both the highest CTM maxima, 39.6°C, and the lowest CTM minima, 3.2°C. Ecological thermal tolerance polynomials calculated for dusky and gulf pikefish had total areas of 617°C and 756°C, respectively. Gulf pikefish possess a significantly larger intrinsic tolerance compared to dusky pikefish, which may indicate disparate use of seagrass habitats. Both species exhibited well defined thermal limits at a biolog- ical tolerance as well as behavioral adaptations when temperatures fluctuate. Continued patterns of sea surface warming could impact local pikefish populations and challenge them to seek new habitats.

10. Comparing and Evaluating Thermal Ecology in Dusky Pipefish (Syngnathus flavus) and Gulf Pipefish (Syngnathus scovelli)
Lais A. O’Boyle, Wayne A. Bennett Jr.
Department of Biology
Little is known about the thermal tolerance of pipe- fishes that, across their latitudinal range, regularly experience large seasonal and diel shifts in water tem- peratures. In this study, we used critical thermal meth- odology (CTM) to estimate upper and lower thermal limits of dusky (Syngnathus flavus) and gulf pipe- fishes (Syngnathus scovelli) inhabiting grass beds in the Gulf of Mexico. Acclimation temperatures ranged 11- 33°C for gulf and 12-32°C for dusky pipefish. Critical thermal maxima and minima were significantly corre- lated with acclimation temperature (p<0.001 in both species) and accounted for 95-98% of the variability in CTM. Gulf pikefish had both the highest CTM maxima, 39.6°C, and the lowest CTM minima, 3.2°C. Ecological thermal tolerance polynomials calculated for dusky and gulf pikefish had total areas of 617°C and 756°C, respectively. Gulf pikefish possess a significantly larger intrinsic tolerance compared to dusky pikefish, which may indicate disparate use of seagrass habitats. Both species exhibited well defined thermal limits at a biolog- ical tolerance as well as behavioral adaptations when temperatures fluctuate. Continued patterns of sea surface warming could impact local pikefish populations and challenge them to seek new habitats.

11. Diversity of microbial communities in the waters of Pensacola Beach before, during and after the Deepwater Horizon Oil Spill
Yen Kim Chau
Department of Biology
Microbial communities are directly impacted from environmental stressors, including pollution events such as the Deep Water Horizon oil spill. To inves- tigate whether the bacterioplankton community changed in response to the oil spill, community structure was compared at two sites along Pensacola Beach between May and August, 2010. Water samples were collected by filtration and DNA extracted. Community structure was determined by Terminal Restriction Fragment Length Polymorphism (T-RFLP) of bacterial 165 rRNA genes. Time permitting, a second set of analyses will be completed targeting dióxigenase genes that are involved in the degrada- tion of aromatic hydrocarbons. There is potential for a significant difference in the diversity of communities between the different intervals throughout the event of Deepwater Horizon oil spill. Final results are cur- rently being processed.
12. Estimation of Thalassemia versus Iron Deficiency in the United States
Nemat Ashraf, Michael Johnston, Kristina Belau, PhD, Justice Mlizo, DrPH
1. Department of Biology, 2. Department of Mathematics and Statistics, 3. Clinical Laboratory Sciences Program, 4. School of Allied Health and Life Sciences

Anemia is a condition that develops when the number of red blood cells (RBC) and/or the amount of hemoglobin found in the RBC drops below normal amount. The low production of globin chains in a RBC makes them microcytic or hypochromic; the RBCs are smaller than normal cells and have less color, respectively. Two major classes of anemia produce microcytes, iron deficiency anemia and Thalassemia. Iron deficiency is related to diet and can be cured by iron treatment. Thalassemia is an inherited condition that may require transfusion; treatment with iron can lead to toxicity for these individuals. The prevalence of Thalassemia in the US is unknown, but it is expect to be linked to ethnicity. To estimate prevalence of Thalassemia in the US, we will analyze composite laboratory data from the NHANES (National Health and Nutrition Examination Survey). NHANES is a program of studies that assess the health and nutritional status of individuals in the US. Using this data, individuals with low MCV will be extracted, and a diagnosis of Thalassemia minor can be separated from Thalassemia by ferritin (iron) level. Gender, age and race will be taken into account to calculate the prevalence of iron-deficiency and Thalassemia in this sample.

13. Screening for Bioactive Compounds Produced by Plants on the UWFW Campus
Steven Peri
Department of Biology

Plants are under continuous assault by bacteria, fungi, and other pathogens in their natural environment. Successful infection by these invaders is often deleterious to the plant. In response, plants have evolved sophisticated mechanisms for detecting and countering microbial pathogens. One part of this response is to synthesize compounds that are deleterious to the pathogen—a form of chemical warfare. Some of these compounds have been isolated and effectively used in medicine to treat human infections and diseases. In an effort to identify additional useful plant compounds, flora on the UWFW campus were screened for antibacterial and herbicidal activities in biosayss. Of the 21 plant species screened, leaf and shoot material from A. julibrissin exhibited the greatest effect in the assays. A thin-layer chromatography system to begin isolating the bioactive compound(s) in A. julibrissin is currently being developed.

14. Construction of an aph-1 Transgene? Gene
Joan Lam, Dr. Hai-Min Chung
The Department of Biology

The model organism Drosophila melanogaster is used to study a variety of gene functions that have been evolutionarily conserved among vertebrates. Aph-1 is a multipass membrane protein that is a component of the γ-secretase integral membrane protein complex. Studies concerning γ-secretase and its components (Aph-1, Presenilin, Nicastrin and Pen-2) aim to understand its mediation of the Notch signaling pathway to manage cell fate and pattern formation during embryonic development. The objective of this research is to construct an aph-1 transgene for Drosophila, allowing researchers to manipulate the expression of the wild type aph-1 gene in an aph-1-/- mutant Drosophila at varying stages of animal development in order to uncover the functions of the Aph-1 protein. The assembly of this transgene involves genetic engineering utilizing DNA sequencing, sequencing analysis, restriction enzyme determination, plasmid isolation, and transformation.

15. Preliminary Age Estimates of the Endangered Smalltooth Sawfish of South Florida
Lindsey F. Patterson III, John K. Carlson, Gregg Poukalik
1. NOAA, National Marine Fisheries Service, South east Fisheries Science Center, Panama City, FL, 2. Florida Fish and Wildlife Conservation Commisssion, Fish and Wildlife Research Institute, Charlotte Harbor Field Laboratory, FL, 3. Biology Department

Smalltooth sawfish, Pristis pectinata, is the first marine fish species listed as endangered under the US Endangered Species Act, yet basic life history data critical for conservation are lacking for this species. The focus of our research is on the conservation of Pristis pectinata. Smalltooth sawfish are in situ with the power to manipulate the expression of the wild type aph-1 gene in an aph-1-/- mutant Drosophila at varying stages of animal development in order to uncover the functions of the Aph-1 protein. The assembly of this transgene involves genetic engineering utilizing DNA sequencing, sequencing analysis, restriction enzyme determination, plasmid isolation, and transformation.

16. The response of phytoplankton community to nutrient enrichment experiments in three northern Gulf of Mexico estuaries
Kendra Stolz
Department of Biology

Nutrients, both nitrogen and phosphorus, support algae growth in aquatic ecosystems. Yet, nutrient enrichment causes excessive algal growth leading to eutrophication, which can have negative impacts in coastal waters. In this project, nutrients and phytoplankton growth response to the addition of nutrients will be measured. The ambient nutrient concentrations in the system will also be determined. Estuaries, being the dynamic interface of marine and freshwater, are of interest for nutrient and phytoplankton research. Grand Bay, Weeks Bay, and Apalachicola Bay of the northern Gulf of Mexico will be the focus of this study. Each displays varying levels of human impact, and environmental forcings such as tidal inflows and coastal loading. The phytoplankton community, both before and after nutrient enrichment experiments, will be examined using light and epifluorescence microscopy techniques. Characterization of the community is a useful indicator providing insight into the potential for harmful algal blooms as well as predicting shifts diversity and dominance. The results of this study will allow for regional characterization of sensitivity to elevated nutrient loading. Preliminary results will be discussed.

17. Joshua T. Neese
William F. Patterson III
Joseph H. Tarnecki
Department of Biology

Currently, insufficient data exist in many artificial reef systems to evaluate the ecological versus fishery role of reefs. This was examined in terms of the differences in red snapper growth at age between natural and artificial reefs. Otoliths were removed from the fish and their annual were read to determine age. Red snapper sagittae were embedded in epoxy and sectioned through their core with an isotome lowered diamond saw ~500 μm thick and were glued to microscope slides with Cytoselect adhesive. Fish were aged by counting opaque zones in otolith sections. An algorithm was used to assign fractional age based on number of opaque zones observed, marginal condition (opaque or translu- cent), and date of sampling. Size at age was plotted separately for red snapper captured at natural versus artificial reefs. A linear regression was fit to each plots, as well as to the combined data, and a likely- hood ratio test was computed in Excel to test if slopes, hence growth rates, were significantly different between habitat types. This data was compared to a similar study from 2001 to gauge if growth rates have changed or if cohorts have begun to recover from years of overfishing.

18. Efficiency of light sources for PMA activation to distinguish live vs. dead cells using qPCR
Elizabeth Kennedy, Karen Craveiro, Kristen Hellein, Joe Eugene Lepo
Department of Biology

A limitation of DNA-based molecular methods is the inability to distinguish between viable and membrane-compromised (“dead”) cells. The DNA binding dye propidium monoxide (PMA) is preferentially excluded from live cells and has been successfully used to differentiate between viable and dead cells in combination with PCR/qPCR. Current literature on PMA-PCR/qPCR varies in the type of light source used to activate PMA. Most often, a 600W halogen lamp is used, with a few others using blue light-emitting diodes (LEDs). High-wattage halogen lamps generate heat that may compromise cell membranes, inactivating the observed effect of PMA. Blue LEDs emit light that most efficiently activates PMA, without generating heat and are less expensive than halogen lamps. Here we compare three light sources: a halogen lamp, an array of 16 blue LEDs focused onto a single sample with a magnifying lens, and an aquarium light strip of four separated LEDs, each mounted in a parabolic reflector (Powerbrite™). We found that the Power- brite™ treatment was superior to the array in i) the parabolic reflector focuses the light more efficiently, providing more intense light; ii) the apparatus was capable of treating four samples simultaneously.

19. Hunting for a Tubby Homolog in Tribolium castaneum
Thomas Stephenson, Rainey Booth, Nicholas Spencer
Department of Biology

The focus of our research is on the conservation of a gene known as Tubby (Tb). Previous studies have shown that in the fruit fly Drosophila melanogaster, Tubby (Tb) mutants express a reduced axonal radius (length/width) in both neurons and glial cells. To identify a malfunctioning of cuticle size regulation. Our goal is to identify the Tubby homolog in the red flour beetle
26. Regional differences in age growth, and mortality of Gulf of Mexico gray triggerfish, Balistes carpio
Fioramonti, C., R. Allman, W. Patterson
1. NOAA Fisheries, 3500 Delwood Beach Road, Panama City, Florida 32408
2. Department of Biology
Gray triggerfish (n = 1,436) were sampled from 2003 to 2008 along the west Florida shelf from recreational and commercial hook and line and commercial longline fisheries, as well as from fishery-independent sources. For Lang (FL) samples from 75 to 697 mm (mean = 353 mm). Translucent zones in dorsal spine sections were validated as annuli by marking captive fish (n = 4) exposed to natural conditions with oxytetracycline; thus, spines sections were used to age fish. Age ranged from 0 to 14 y with a mean of 4.1 y for recreational hook and line, 4.6 y for commercial hook and line, and 6.0 y for commercial longline fishing gear. Mean age of fishery-independent samples was 3.8 y for hook and line, 3.4 y for trap, and 1.3 y for trawl gears. Gray triggerfish entered the commercial hook and line and recreational fisheries by age 3 and the commercial longline fishery by age 7. A von Bertalanffy growth function was fitted to triggerfish FL at age data, resulting in a model with

\[ \text{FL}_{\infty} = 1824 \left[1 - e^{-\frac{t}{T}} \right] \]

A goodness-of-fit test was conducted monthly from multiple sites located along Florida Panhandle beaches. These sites include Perdido Key State Park, The UWF property on Santa Rosa Island, Navarre State Park, Topsham Beach State Park, and St. Andrews State Park, and the tissue is weighed and hydrocarbons extracted for analysis. Our expectation is that Donax variabilis will be a sensitive biological indicator of marine pollution as related to the Deepwater Horizon oil spill.

22. Detection of phosphoinositide-binding proteins in Tetrahymena vorax using liposomes as an affinity matrix
Thomas M. Yarbrough, Philip E. Ryals
Department of Biology
Tetrahymena vorax, a unicellular eukaryotic organism, was used to identify the presence of proteins that bind to inositol-containing phospholipids. T. vorax can be induced by starvation to differentiate from a microstomial cell to a macrostomal cell, allowing them to engulf larger cells. Cultures of T. vorax were homogenized at mid-logarithmic growth phase, and their microsomal fractions isolated by ultracentrifugation, carbonate extraction, and dialysis. Microsomal protein samples were incubated with control liposomes containing four lipids common to all eukaryotes and experimental liposomes containing the same lipids in addition to a phosphoinositide. Samples were run on polyacrylamide gel electrophoresis and stained with SYPRO-Ruby. Preliminary results show two bands with molecular weights of 44 kDa and 49.5 kDa in the experimental lanes that are greater in intensity than the control lanes, suggesting phosphoinositide-binding proteins are evident in the microstome through forced dedifferentiation. The two protein samples. Further investigation of phosphoinositide-binding proteins is planned using macrostomial populations and temperature treated microstomal populations of Tetrahymena patula. Phosphoinositide-binding proteins are likely to be involved in the differentiation process of Tetrahymena spp., and their presence may provide clues to a better understanding of the mechanism controlling differentiation.

23. Effects of Lithium Chloride and Valproic Acid on Phospholipid Composition of Tetrahymena patula
Katie C. Sprinkel, Phillip E. Ryals
Department of Biology
Lithium and valproic acid (VPA) are common treatments for bipolar disorder, yet their biochemical mechanisms are not well understood. This research seeks to test the hypothesis that lithium chloride (LiCl) and VPA will induce Tetrahymena patula to alter morphology from a macrostomal to a microstomal phenotype through forced dedifferentiation. The effects of MgCl2, a known competitor of lithium on phospholipid composition between control and treated cells were examined. Cultures of T. patula were treated for 24 h and examined for pheno- type. Cell count data shows that controls contained 79 ± 2.5% microstomes, 20 mM LiCl induced 55.2 ± 18% microstomes, 500 mM VPA induced 20.0 ± 5.2% microstomes and 20 mM MgCl2 induced 42.2 ± 16% microstomes. Protein samples were collected. Sodium dodecyl sulfate polyacrylamide gel electrophoresis was performed and gels were stained using Pro-Q Diamond and Sypro stains to visual- ize the change in phosphorylated and total proteins, respectively. Gel Imaging Software showed that a 49 kDa band in control samples yielded 14.6 ± 1.3% phosphorylation. Lithium chloride (LiCl) at 18% microstomes, 500 mM VPA treatments for 24 hrs. To separate polar lipid classes, thin-layer chromatog- raphy was performed in a chloroform/ acetone/methanol/water (75:25:5:2.2) mobile phase. Phospholipid composition was determined by phosphorus as- say. Total phospholipid was separated with Jolles sol- vent system to resolve phosphoinositides (Jolles et al., 1981). Analysis indicates an increase of aminoethylphospho- nolipid in both LiCl (26.5 ± 1.86) and VPA treatments (53.2 ± 5.30) compared to the control (21.6 ± 1.56). Sphingolipid for LiCl treated (19.8 ± 1.36) cells decreased in comparison to the control (24.0 ± 1.30). Densitometry analysis shows consistent percentages of phosphoinositide types between control and treat- ment groups. Data suggests that both LiCl and VPA treatments induce a response in phospholipids in T. patula. The possibility exists that the mechanisms involved in the cellular response to these compounds may involve phospholipid interaction.

24. The effects of lithium and valproic acid on protein phosphorylation in Tetrahymena patula
Katie C. Sprinkel, Phillip E. Ryals
Department of Biology
Lithium chloride (LiCl) and valproic acid (VPA) are common treatments for bipolar disorder, yet their biochemical mechanisms are not well understood. This research seeks to test the hypothesis that lithium chloride (LiCl) and VPA will induce Tetrahymena patula to alter morphology from a macrostomal to a microstomal phenotype through forced dedifferentiation. The effects of MgCl2, a known competitor of lithium on phospholipid composition between control and treated cells were examined. Cultures of T. patula were treated for 24 h and examined for pheno- type. Cell count data shows that controls contained 79 ± 2.5% microstomes, 20 mM LiCl induced 55.2 ± 18% microstomes, 500 mM VPA induced 20.0 ± 5.2% microstomes and 20 mM MgCl2 induced 42.2 ± 16% microstomes. Protein samples were collected. Sodium dodecyl sulfate polyacrylamide gel electrophoresis was performed and gels were stained using Pro-Q Diamond and Sypro stains to visual- ize the change in phosphorylated and total proteins, respectively. Gel Imaging Software showed that a 49 kDa band in control samples yielded 14.6 ± 1.3% phosphorylation. Early findings suggest increases in the phosphorylation of a 49 kDa protein

with treatments of LiCl and VPA, and inhibition of the effect of LiCl on phosphorylation by MgCl2.
28. Isolation and characterization of Polynuclear Aromatic Hydrocarbons from Donax Variabalis affected by the Gulf oil spill

Robert Pelot, Alexandra Vestal, Melissa Hagy

Department of Chemistry

29. Seasonal Patterns of Ultraviolet Photo-protective Pigments in Phytoplankton

Holly Prochazka, Kyrsten McKeand, Sharon Blackwell, Jennifer Glancy, Victoria Singleton, Wade Jeffrey, Pamela Vaughan

Department of Chemistry

Center for Diagnostics and Bioremediation

30. Synthesis and Hydrogen Bonding Studies of New 9-Dipyrrinone Carboxylic Acid Derivatives

Dolores Dean, Stephanie Spiegel, Luis Flores, Korry Crawford, Michael T. Huggins

Department of Chemistry

31. Fluorescent detection of organophosphate chemical warfare agents

Deborah Barkley, Ian Walton, Michael T. Huggins*

Department of Chemistry

32. Examination of Triclosan Photo-degradation with Varied Salinity and Organic Matter Content

Janae Baptiste, Pauline Barns, Amber McCarver, Pamela Vaughan

Department of Chemistry

33. Fluorescent detection of organophosphate chemical warfare agents

Michael T. Huggins*

Department of Chemistry

34. A Preliminary Analysis of Employment Opportunities for Offenders in Northwest Florida

Danielle Butler, Justin Flynn, Laura Groat, Britany Hoyt, David Morrell, Amanda Tryling, Robert Zachowski, Dr. Cheryl Scannon

School of Justice Studies and Social Work

35. Prevalence of Corn in Today’s Economy

Ruth Ashley, Tabatha Ducharme

Department of Economics

36. A Preliminary Analysis of Employment Opportunities for Offenders in Northwest Florida

The Northwest Florida Reentry Task Force is one such organization that seeks to assist reentrants with family issues, employment, behavior change, and housing.

The study reports on a survey of employer attitudes toward hiring reentrants in the Pensacola area. A survey questionnaire was developed to identify whether employers are willing to hire former felons, the extent to which they do hire former felons, perceived barriers to hiring former felons, and knowledge of federal incentives to hire former felons.

The study is part of a class project in Ethics and the Justice System whereby student are examining the issue of what our responsibility is to formerly incarcerated persons.

The amount of corn American industries produce yearly is enormous. Of that corn, only a small percentage is edible in its original state. The rest is used as energy (ethanol), natural flavoring, corn syrups, and fuel for livestock. Walking through a grocery store and flipping “ingredient” labels reveals the massive market of corn starch, glucomylase, high-fructose corn syrup, and more corn-based products. Cattle are no longer raised in pastures and the rise of concentrate feedlots and the fattening process of cattle. These by-products of maize are stimulating the economy of the United...
to take control of the robot manually and steer it to a
In case of emergencies, the operator has the ability
of infrared sensors located at the front of the vehicle.
will also be able to avoid obstacles through a series
be able to navigate a series of waypoints provided
Department of Electrical and Computer Engineering
Our Capstone Design project for Electrical and
Computer Engineering will utilize a quad-rotor helicopter to accomplish indoor reconnaissance mis-
This year-long project will be in the technical design and development stages during the time of
presentation. Microprocessors onboard the quad-cop-
ter will be updated with a navigational checkpoint file at that time. The microprocessors will intervene with the pre-fabricated navigational controls of the quad-
copter to maintain flight. During flight, the quad-cop-
ter will travel along the designated pathway (via
checkpoints) while avoiding obstacles and maintain-
ing an adequate flight distance away from walls. The
on-board camera will send digital images to an off-
site computer; this off-site computer will implement
MATLAB (MATrix LABoratory) mathematical soft-
ware to analyze the images for a desired target speci-
fied by the programmer. In addition to visual targets, nonvisual sensors can be implemented to inform the
user of other environmental hazards (e.g. carbon
monoxide gas). The navigational, imagery, and sen-
sors analyses done by the quad-copter and off-site
computer will be completely autonomous once all of
the hardware and software designs are incorporated for a complete design.

Michel Starr, Brandon Walker, Jarrod Donald Palmer Department of Electrical and Computer Engineering

38. iRobot Create: Traffic Simulations
Joshua Davis, Michel Starr, Brandon Walker, Anton Yaresko
Department of Electrical Engineering
Using a robot similar to the autonomous Roomba vacuum cleaner, the iRobot Create platform can be used to simulate the complexity of operating a vehicle through small scale traffic situations. As an idea to promote traffic safety, the iRobot is used to demon-
strate a model for driving assistance by navigating along a test track. Through an on-board camera and proximity sensor, the iRobot collects information about its surroundings and communicates that in-
formation through a serial connection to a central processor running in MATLAB. Autonomously, the
iRobot decides when to brake at stop signs, which direction to turn when approaching intersections, and how to make proper lane changes to avoid other ve-
hicles. The iRobot is equipped with brake lights, turn
signals, and automatic headlamps which represent an automobile’s light communication safety devices. The on-board camera is mounted on a stepper motor so that it is capable of rotational motion providing 360º of vision reducing blind spots.

39. Autonomous Research Surface Vessel
Anton V. Yaresko, Alexander B. Keyhani
Department of Electrical Engineering
The Autonomous Research Surface Vessel is a fully-
amazonous vessel to collect water samples from different user-specified locations within a large body of water such as a river, a lake, or an ocean. The vessel will accept user-input GEO coordinate locations (Latitude, Longitude), which will aid in the advancement of environmental science and water research. The main task of this autono-

40. High-Speed Video Camera Frame-Rate Validation
Jarrod Donald Palmer
Department of Electrical and Computer Engineering
This document details the design of a system to vali-
date several parameters of the frame rate of a high-
speed video camera. The system allows the user to determine the frame rate, the duration of each frame, and the delay of each frame. This is specifi-
cally designed for cameras with frame rates up to 1000 frames per second. Ideally, this would be used to verify that the camera is capturing and recording 1000 frames per second, as well as to verify that the time stamp of each frame is accurate. Such a system would be useful for companies and organizations that use high-speed video recording on a regular basis. This system would allow them to determine the accuracy of their video recordings.

41. Alternative Energy: Coast to Coast
Jessica Engel
Department of Environmental Studies
Nonrenewable sources have been the standard for providing energy; yet, increased research has pro-
vided opportunities for energy development that are renewable and have less harmful environmental impacts. Scholars from many different backgrounds from politicians to economists to scientists study alternative energy, and with every single one, there is another opinion. The main alternative sources on the horizon today are biomass, wind, geothermal, hydroelectric, and solar. Alternative energy sources currently being supported, and their environmental impacts were investigated. Conclusions were drawn based on the sources that provide the most poten-
tial to compete with the high demand for energy by interviewing experts in the field and consulting ad-
ditional websites and articles on alternative energy. A filmed documentary was created based on tours and interviews with experts from around the world, and hydro-
electric plants and additional literature research to demonstrate the benefits and drawbacks of alternative energy sources.

States as well as the rest of the world. Debates among scientists argue if such massive quantities of corn in today’s diet are hazardous or beneficial to our health. Meanwhile, agricultural policy-makers discuss if this corn production is healthy for the environment and/or necessary for the economy to prosper. This visual representation brings awareness to the true statistics of the politics of corn.

42. Initial Changes in Soil Quality Characteristics Due to Mob Grazing
Maureen Harrington
Department of Environmental Studies
This study examines the initial soil quality changes in pasture land of Walnut Hill, Florida due to the adoption of a sustainable agricultural practice, mob grazing. Due to the adverse effects associated with traditional grazing methods on soil quality and the widespread production of cattle in Florida, the de-
termination of sustainable techniques to reduce the ecological impacts of livestock grazing is important. Therefore, rigorous analysis of mob grazing practices is essential to advancing ecological integrity and sci-
entific innovation in our geographic region and else-
where. Soil quality characteristics measured include: soil respiration; bulk density; earthworm population estimates; and nutrient status. The evaluation of each soil characteristic will be triplicated on two soil types for both conventional and mob grazed pasture sites. Changes in the characteristics will be determined from comparisons between areas of conventional pas-
ture and mob grazed pasture on the same soil type. Changes over time in rooting length of plants in the mob grazed sites will also be examined. Data from this study may be employed in farmer education and outreach promoting the environmental benefits of sustainable agriculture practices.

43. Effects of Mob Grazing on Soil Quality
Halle Johnson, Johan Liebens
Department of Environmental Studies
Mob grazing is a farming practice that involves
concentrated grazing on small plots of land over a short period of time. Although farmers have noted a positive impact on their land the implications of this method for soil quality have not been thoroughly researched. The intent of this study is to examine and identify the changes in soil quality attributed to mob grazing. Two local soil series were selected for ex-
amination in north Escambia County, FL. Samples of the these soils have been collected in triplicate from areas that have experienced mob grazing, and nearby areas that have not yet. These samples will be tested to determine soil pH, aggregate stability, infiltration capacity and organic material. The results of our work will be examined to identify any changes between soil series and over time in order to determine the impact mob grazing has had in the area. The findings from this work will help expand scientific knowledge on the impact of mob grazing on soil quality and will contribute to the knowledge of the regional farming community.
44. Multidecadal predictability in summer drought variability in the Southeastern United States
Ashley Weathersall, Dr. Jason Ortegen
Department of Environmental Studies
From confining the region comprising the Southeastern U.S., we identified three distinct subregions of homogeneous summer drought variability using Factor Analysis with a Principal Components model. One of these subregions was the Palmetto Hydrological Drought Index (PHDI) for the period 1895-2008. We labeled the subregions the Southeast Atlantic Coastal States (SEACS), the Eastern Gulf South (EGS), and Florida (FL). Each subregion exhibited multidecadal variability in summer moisture conditions during the observed period. Low-frequency moisture variability in the SEACS is significantly associated with specific ocean-atmosphere oscillations including the Multidecadal Atlantic Oscillation (AMO) and the North Atlantic Subtropical Anticyclone. Neither the EGS nor FL drought variability is significantly (p = .05) associated with the climate indexes in this study. This indicates that known relationships between summer drought variability in the Southeastern U.S. and climate indices are reflected in the SEACS, with weaker and often insignificant signals in the EGS and FL. The results may be useful to water resources managers in the Southeast and may help in drought forecasting and preparedness in a region that suffers from even short-lived summer droughts.

45. The Effects of Fire on Groundwater Chemis-try
Stephen Schoen, Dr. Matteo Schwartz
Department of Environmental Studies
Previous research in tropical rainforests indicates that groundwater metals and inorganic nutrients are significantly affected by clearing and burning of the land surface. This project aims at obtaining a better understanding of the effects fire has on groundwater chemistry. Groundwater samples collected from locations where controlled burning has been prescribed and from control sites separate from those burn locations. Samples will be collected through the use of piezometers installed at a number of sites, including burn and non-burn locations. Groundwater samples will be tested for physical parameters, including turbidity, temperature, salinity and dissolved oxygen, as well as for dissolved inorganic nutrients. Groundwater samples will also be collected from burn and non-burn sites immediately following rain events. It is our belief that the controlled burns will have an impact on groundwater chemistry, and that a meteorological event such as rain will increase these effects through leaching.

46. Groundwater Nutrient Variability and the Implications of its Discharge
Mike Kohn
Department of Environmental Science
The purpose of this study was to measure the varying concentration of nitrogen and phosphorus at a range of sites near to and within Escambia County, Florida, and to determine their potential impact on the surrounding water bodies once these nutrients are discharged in groundwater. During this experiment, groundwater samples were taken using mini piezometers and analyzed for nitrogen and phosphorus. The concentrations of nitrate, nitrite, ammonium, and phosphate for each site were measured using Shimazu UV/Vis Spectrophotometer. Then, using data from research in-progress, the influence of these nutrient concentrations was examined in the context of their influence on the local marine ecosystem. This assessment took into special account the N:P ratios displayed at each groundwater sampling site as these ratios can be compared to the Redfield standard which is 16:1:1.

47. Seasonal Variation of Groundwater Discharge Rates and Groundwater Nutrient Inputs of Western Escambia Bay, Florida
Dawn Prince
Department of Environmental Studies
Submarine groundwater discharge (SGD) is a phenomenon in which terrestrial freshwater and recycled seawater circulates freely through continental shelf sediments and reemerges along the coastal zone seafloor. In some cases, SGD can be a more significant contributor of nutrients to surrounding rivers. SGD also demonstrates seasonal fluctuation with highest discharge rates and nutrient inputs typically occurring in summer and lowest discharge and nutrient inputs typically occurring in winter. The winter and summer fluxes of SGD and its associated change in nutrient inputs were analyzed for Escambia Bay, Florida. Rates of SGD were determined using a radon mass balance approach and seepage meter. Concentrations of nitrate, nitrite, ammonium, and phosphate were determined in groundwaters, pore face waters using spectrophotometric analysis. Concentrations of nutrients were multiplied by SGD rates to determine nutrient inputs into Escambia Bay and comparisons were made between SGD rates and nutrient inputs for summer and winter seasons.

48. Examination of Longleaf Pine Savanna Restora-tion on the University of West Florida and Sugges-tions for Improved Results.
David Lee
Department of Environmental Studies
This paper summarizes current literature, and examines current burning procedures, to determine the appropriate techniques to effectively restore a degraded longleaf pine (Pinus palustris) ecosystem located at the University of West Florida, Pensacola FL. The natural range of pristine longleaf savanna habitat once covered 37 million ha in the southeastern United States. Now, a mere 0.01% of this habitat remains. The majority of this remaining habitat continues to be degraded by hardwood infiltration. Current literature suggests that the reintroduction of a natural fire regime as an ecological process to control hardwood domination and understory growth is necessary for regeneration. Depending on the level of degradation of other mechanical or herbicidal techniques may be needed. At the University of West Florida, two plots were burned by the Florida Division of Forestry in an effort to restore the natural habitat. The first plot was burned at low intensity and was too patchy for full restoration to be likely. The second plot was much more thoroughly burned and may show promising results in the future.

49. Devolution in the United Kingdom: Enhanc-ing or Undermining the State?
Jennifer Reed
Department of Government
I will be presenting on the topic of devolution. I am focusing on the United Kingdom since it is one of the most well-known instances of devolution and was highly controversial in its initial stages. Achieving devolution in the UK required multiple legislative acts and the popular support of the citizenry. I am concentrating on the primary devolved areas of the United Kingdom, which includes Scotland, Wales, and Northern Ireland. I examine the features of devo-lution and whether the growing powers devolved to these areas are weakening the central government and leading to the devolved parts of the UK. I present the history of the United Kingdom, as it pertains to the inclusion of Scotland, Wales, and Northern Ireland. Next, I examine the crucial legisla-tion that led to devolution and the institutions and powers of each region. I then investigate the problems posed by devolution and focus its effectiveness and how it controls the functioning of the central govern-ment. Finally, I examine the problems with devolution in the UK. I assess whether the decision to devolve power was a good choice and the future outlook for devolution in the UK.

50. Civics Education: Comparing Public, Private and Home Settings
Mary Ann Johansen
Department of Government
In 1920, the American Political Science Association created the APSA Committee on Instruction in Political Science (Study of Civics 1922, 116.) In a 1922 article, the Commission presented its suggestions. Among the findings of the Commission was that the study of Civics in America was "devolved in the whole range of the social sciences, economics, sociology, ethics and international relations," (Study of Civics 1922, 116) should instead be focused on giving the American pupil "an intelligent conception of the great society of which he is a member, his relation to it, what it requires of him, how it is organized, and what functions it performs." (Study of Civics 1922, 117). The quality and effectiveness of civics educa-tion is called into question when political participation is consistently very low (Election statistics 2010). After comparing and contrasting public, private, and home education curriculum and interviewing teachers and students, what can be concluded about the quality and effectiveness of current Civics Education programs in the Northwest Florida and the United States’ Citizenship Test, how effective are the curricula in these three areas are at educating North-west Florida young people about their role in society? Is there a marked difference among the three types of education?
52. China’s Naval Security Strategy: Peaceful Rise or Looming Threat
Michael Trevathan
Department of Government

This paper endeavors to examine the modernization programs implemented by the People’s Liberation Army Navy (PLAN) since the end of the Cold War, and how these processes can be foretold of China’s grand strategic security policy for the Pacific. This exploration will utilize the factors advanced in defensive realist theory, namely: military, diplomatic, domestic variables in an attempt to answer China’s security ambitions and the (PLAN’s) ability to advance and secure these maritime interests. A quantitative analysis of the ideological composition of the available documents is taken into consideration. The intention of this paper is to investigate whether and to what extent the ideological composition of the district court affects venue shopping and ex rel the frequency and consequences of this practice when a constitutional question is at stake. The federal district courts in Florida will be used as a case study. A quantitative analysis of the ideological composition of the Florida federal district courts and the ideological slant of cases containing relevant constitutional questions brought to these courts will be undertaken. By examining this data, a determination will be made concerning both the frequency and outcome of the process of venue shopping at the federal district court level. Quantitative analysis of the constitutional challenge to the federal health care law will be used to supplement the qualitative findings.

55. The Deinstitutionalization of Congress
Jennifer Hobb Fulmer
Department of Government

This article will explore the level of deinstitutionalization of the United States Congress by examining Congressional elections from 1990 to 2010. In his 1968 article, “The Institutionalization of the U.S. House of Representatives,” Nelson Polsby identifies three key conditions which signify the presence of institutionalization. By examining conditions which indicate a level of institutionalization, I will determine if the same conditions exist throughout the timeframe indicated. Polsby’s methodology for determining institutionalization will serve as the principle methodology to determine if deinstitutionalization has occurred recently. While this article’s primary focus is not to determine if deinstitutionalization has occurred, it will offer some social and political events and climates which may have contributed to any deinstitutionalization.

57. Preceding Judicial Decision-Making
Kjersten B. York
Department of Government

Attempting to understand the motivations behind judicial decision-making has led to diversity in the scholarship, though considerable discussion has been held within these schools of thought from the use of precedent within judicial decisions. I attempt to answer whether precedent influences judicial decision-making. The scope of this paper is limited to studying the Supreme Court decisions and will focus on the specific issue of Second Amendment rights (subject to change). Understanding whether precedent influences the judicial decision-making process will entail data analysis, which will examine the influence precedent held on the dissenting justices on past court cases. I hope to illustrate that precedent does hold a significant level of influence on the decision-making process within the judiciary. The aim of the paper is to examine the influences on judicial decision-making and understand the impact precedent may or may not have upon this process, which will contribute to the constitutional and practical understanding of the judiciary.

58. United States House of Representatives’ District Size: The Inverse Relationship Between District Growth and Representation
Matthew J. Schwalb
Department of Government

Is there a negative relationship between the size of the nation’s population and the democratic representation it is able to guarantee its citizens? More specifically, as a nation’s population grows, how much must its assembly size increase in order to maintain a given quantity of per capita representation? With the enactment of the Apportionment Act of 1911, the U.S. Congress was mandated to cap its assembly size of the U.S. House of Representatives at 435. Currently, the U.S. House of Representatives’ district size is roughly 710,000 citizens per representative. In 1911, the year Congress enacted its assembly size limitation, the U.S. House of Representatives’ district size was roughly 214,000. This means that a 330% increase in district size has occurred between 1911 and 2010. What consequences does this historical growth have? I will examine how this increase in district size affects the representation, real or perceived, of the U.S. House of Representatives as well as examine the possible effects of increasing the assembly size in proportion to the 1911 district size, an assembly size which would equal 1444. Given that the United States utilizes a majoritarian, single member district electoral system, my aim is to determine the proportionality of the U.S. system, but rather trace the evolving effects of the drastic increase in district size over the last 99 years.

59. Preserving Historic Foley: the Foley, Alabama, Historic District
Jonathan O’Neil, Adrea Watford, Allison Wofford
Department of History

The City of Foley, Alabama, has requested assistance in evaluating its current historic preservation ordinances. We, as undergraduate Pre-Law students, will assist the aspiring community in exploring various historic preservation ordinances and regulations in an attempt to expand the historical commission’s efforts to preserve Foley’s unique historical resources. While working with the City of Foley, we will be assigned extensive readings within the field of Historic Preservation Law. Consequently, we will be exposed to all aspects of Historic Preservation Law. We will meet periodically with city representatives that work with the local historical commission and engage in a number of historic preservation activities within the Foley community. Utilizing the class readings and our first-hand accounts, we will evaluate Foley’s existing historic preservation laws, and offer suggestions for alterations and additions to its current ordinances. Moreover, this will entail a rigorous exploration of a variety of historic district ordinances that are utilized by local communities nationwide.

Our research will clearly benefit the City of Foley, the Pre-Law programs of both departments of History and Political Science, and the University of West Florida. Our experience with this program will perpetuate our success in applying to and attending law school.

60. Examining a Treatment for Survivors of Sexual Violence with PTSD Utilizing CBT and Aerobic Exercise
Erika Smith, Petra Schuler, Ludmila Cosio Lima, Robert Rotunda.
Department of Health, Leisure and Exercise Science

This preliminary study examined the impact of an 8-week aerobic exercise treatment on symptoms of Posttraumatic Stress Disorder (PTSD) among a sample of adult women who have experienced sexual violence. Forty-four participants were recruited natur-istically through a Certified Rape Crisis Center in Pensacola, Florida. Participants received cognitive behavioral therapy (CBT) or CBT plus group aerobic exercise sessions (CBT+E) from a licensed Clinician Administered PTSD Scale for DSM-IV – Current and Lifetime Diagnostic Version (CAPS), the PTSD Checklist - Specific Version (PCL-S), and the Symptom Checklist – 90 - Revised (SCL-90-R). Results revealed that both groups improved on all measures: main effects for time and group were observed for the PCL-S, and CBT+E had a significant effect. Prepost change was also observed: more participants in CBT+E no longer met the criteria for PTSD at the conclusion of

the European Union, both as a static and dynamic institution, strongly resembles in nature the United States around the time of its founding. This suggests a tendency in the European Union towards centralization and conformation, in much the same direction as the United States did two centuries ago. Tentatively, one prediction for the future would be that the EU continue to centralize to some extent through its institutions, but will still never come to resemble the United States in forming a single state. There is no evidence that Europeans want to completely yield national sovereignty. However, increased benefits of centralization and the self-reinforcing tendency of centralized institutions to better the chances for further centralization suggest a continued centralizing trend in the near future.

53. The Politics of Defense Contracting: Assessing the Changes from the 1990’s to 2000’s
Jennifer Hobbs Fulmer
Department of Government

This exploration will utilize the factors advanced in defensive realist theory, namely: military, diplomatic, domestic variables in an attempt to assess China’s security ambitions and the (PLAN’s) ability to advance and secure these maritime interests. A qualitative analysis of the ideological composition of the Florida federal district courts and the ideological slant of cases containing relevant constitutional questions brought to these courts will be undertaken. By examining this data, a determination will be made concerning both the frequency and outcome of the process of venue shopping at the federal district court level. Quantitative analysis of the constitutional challenge to the federal health care law will be used to supplement the qualitative findings.
61. The Influence of Unconscious Needs on Hotel Brands

Jennifer Kelly, Xuan Tran
Department of Hospitality

The present study explored the relationships between unconscious needs and hotel brands using responses from 277 university students for a pilot test. The respondents were introductory psychology students who were attending College of Science, College of Business, and College of Professional Studies at the University of West Florida in 2006. One of the classes including 300 students from the three colleges was randomly selected for the Themeatic Apperception Test (TAT). The response rate was 92.33% (277/300). The participants completed the Thematic Apperception Test (TAT) and a survey which assessed various hotel brands including Marriott, InterContinental, and Accord. Canonical analysis was conducted to determine which independent variables (need for achievement, need for affiliation, and need for power) were significantly associated with hotel brand names. The findings indicated that 1) people with a high need for affiliation preferred Accord such as Motel 6, Studio 6, etc. 2) individuals with a high need for power indicated a preference for Marriott such as Ritz Carlton, JW Marriott, etc. and 3) need for achievement scores significantly relate to InterContinental such as Hilton, Crowne Plaza, etc. Unconscious needs and hotel identities are also discussed.

62. Impact of Conscientiousness and Extraversion on Hotel Preferences

Jackie Lee, Xuan Tran
Department of Hospitality

The purpose of the paper is to explore the relationship between guests’ Conscientiousness and Extraver- sion and their hotel preferences. Sixty-four guests in three hotels in Pensacola, Florida (La Quinta, Crowne Plaza, and Margaritaville) participated in a pilot test from October 1, 2010 to November 15, 2010. The study analyzed the correlations between Conscientiousness and Extroversion of hotel guests (Costa & McCrae, 1992) and their hotel preferences. Multiple linear regressions were conducted. Findings indicate that most guests in a hotel belong to one type of personal- ity and there is a significant association between this type of personality and hotel services. High Consci- entiousness people, who strive to find the best values, will stay in a hotel with best price. High Extrversion people, who like to draw attention to themselves, will stay in a luxurious hotel.

63. Avoiding Partial Latin Square Simultaneously

Hannah Berry, Dr. Jaromy Kahl
Department of Mathematics

Cheyney and Rhodes proved that 2 partial Latin squares of order 4k are avoidable for odd k and 4k for even k. We prove that 2 partial Latin square are avoidable for k > 42.

64. Using MATLAB to Solve Real Symmetric Eigenvalue Problems

Tatum Tirado
Department of Mathematics

Eigenvalue problems arise naturally in many areas of science. In this paper, we discuss how to use MATLAB, a well-known software package to compute eigenvalues of real symmetric matrices. In particular, we construct a homotopy to connect an approximation matrix B to a given matrix A and analyze the paths taken by the eigenvalues as the homotopy parameter t varies. Understanding these (smooth) curves can be useful for calculating A based on the eigenvalues of B. We show that the curves are strictly increasing, strictly decreasing, or constant, and that the largest eigenvalue curve is always increasing while the smallest eigenvalue curve always decreases. After an eigenvalue is separated, we use MATLAB subroutines to compute approximations of the eigenvalue.

65. The Finite Difference Methods for the Partial Differential Equations

Travis Damion
Department of Mathematics and Statistics

We study the discretization of the partial differential equations, in one or two dimensional space. We use the finite difference methods to discretize the problem and error analysis will be given at different cases. Numerical experimental results show the stability and accuracy of the finite difference methods only when we apply the scheme to a test problem. The plots of true solutions and computed solutions will be given. This is the joint work with Dr. Jia Liu.

66. Representation of a flow: The Navier-Stokes equations

Megann Kirk
Department of Mathematics and Statistics

We study the basic properties of the Navier-Stokes equations. For the first show how to get the Navier-Stokes equations, then different types of the Navier-Stokes equations are discussed. The solutions of the Navier-Stokes equations including the time dependence problems are explored. At the end of the paper, the numerical solution methods will be discussed. This is the joint work with Dr. Jia Liu.

67. Differences in Northern Gulf of Mexico Reef Fish Size and Community Structure Before and After the Deepwater Horizon Oil Spill

Kaitlyn Tooe, Joseph Tarnocki
Department of Biology

The overall effects of the sinking of the Deepwater Horizon drilling platform are still unknown, and many projects have been put into place to gain more information. This project compares the reef fish community structure at natural versus artificial reefs in the Northern Gulf of Mexico before and after the Deepwater Horizon Spill. Video was collected from a remotely operated vehicle (ROV) at both artificial and natural reefs in the Northern Gulf of Mexico. Video from these reefs was collected before the oil spill for a different species. The size of fish species was compared at each site, and compared to the data collected before the oil spill. Though this project might not give immediate results, it will be a great stepping stone for future research in effects of oil on reefs.

68. Trophic Ecology and Population Dynamics of Tomate, Haemulon aurolineatum, on the Northern Gulf of Mexico Continental Shelf

Michael J. Norberg J.H. Tarnecki J.T. Neese
W.F. Patterson, III
Department of Marine Biology

The tomate, Haemulon aurolineatum, is a species of reef fish which can be found on approximately 80% of offshore reefs on the northern Gulf of Mexico (GOM) continental shelf. Its ecological importance is apparent given it is among the top ten most abundant reef fish species. We prove that two partial Latin squares are avoidable for odd and 4k for even k. We prove that 2 partial Latin square are avoidable for k > 42.

69. Analysis of the Donax (Mollusca: Bivalvia) populations post Deep-Horizon oil spill from Pensacola Beach & Perdido Key Beach, Florida

Stephanie Witherspoon, Renee Dews, Rebecca Drake, Travis Tharrett, Richard Snyder, Christopher Pomory
Department of Marine Biology

Marine bivalves have often been utilized as bioindicators of environmental pollution. Bivalves accumulate contaminants within their tissues, which can be heavy metals, hydrocarbons, and/or various other harmful chemicals present in seawater. Using Donax variabilis as a focal species, this study assessed population changes in Donax post Deep-Horizon oil spill. Monthly sampling of Pensacola and Perdido Key Beaches was conducted at three spatial scales by taking core samples of intertidal zone sediment at high tide. Counts, wet and dry weights were record- ed. Over a period of four months significant variabil- ity was found at all spatial scales with Perdido Key consistently having lower values.

70. “The Doctrine of Chance”: Why Pascal Made the Wager

Carter Johnson
Department of Philosophy

In all the papers I have read, the authors discussing Pascal’s Wager follow the same interpretation. Pascal, they say, formulates an early decision-theoretical matrix which opposed infinite bliss to infinite misery; he wants to accept theism because atheism might lead to infinite misery. This interpretation makes the Wa- ger the first, and most tyrannical, pragmatic argument for belief in God. However, in this paper, I argue that Pascal never meant the Wager to be an argument for belief in God. Examining some of the passages in the Pensées will reveal his true intention.

71. Fluorescence of CdSe nanoparticles in the liquid crystal 8CB near the phase transitions

Julie Gray, Shane Dreye, Darren North, Samuel Beck; Tim Requa, Lucio Ulloa, Christopher Mikesell
Department of Physics; Department of Chemistry

The liquid crystal 4-ocyl-4-cyanobiphenyl (8CB) doped with cadmium selenide nanoparticles was in- jected into a commercially available liquid crystal cell.
The spectrum of fluorescence from the injected CdSe nanoparticles in Liquid Crystals near each phase transition.

Nonlinear dielectric response of the liquid crystal LC8C near phase transition

The AC magnetic susceptibility is an important probe for characterizing magnetic properties of many materials. In this effort, an innovative high-resolution quartz AC susceptometer is constructed. It provides us a capability to conduct state-of-the-art experiments in AC magnetometry for materials magnetic property investigation associated with important physics such as that of colossal magnetoresistance, superconductivity, charge/spin density wave and phase transitions occurring in novel condensed matter materials, and satisfies the needs of students' research training and education in experimental sciences.

Automation of the Dielectric Characterization of Liquid Crystals

A Labview controlled automatic electrical resistivity measurement and data taken system for science research and education is developed to show the interrelationships among users' trust, privacy and security on the adoption of ubiquitous commerce. The precedent factors are selected to show high non-uniformity for the demagnetization field inside the sample depending on the sample aspect ratio and the direction of the externally applied magnetic field.

The calculation of demagnetization field distribution in paramagnetic materials with spherical sample geometries

A general method for the calculation of demagnetization field in paramagnetic materials is described, and the demagnetization field is calculated for samples with spherical geometries. The results show high non-uniformity for the demagnetization field inside the sample depending on the sample aspect ratio and the direction of the externally applied magnetic field.

80. Development of a Users’ Trust Model in Ubiquitous Commerce

This research investigates the factors that impacting the adoption of ubiquitous commerce with a focus on users’ trust in privacy and security. First, a framework is developed to show the interrelationships among users’ trust, privacy and security on the adoption of ubiquitous commerce. The precedent factors that affecting privacy and security are selected to show high non-uniformity for the demagnetization field inside the sample depending on the sample aspect ratio and the direction of the externally applied magnetic field.

The calculation of demagnetization field distribution in paramagnetic materials with spherical sample geometries

A general method for the calculation of demagnetization field in paramagnetic materials is described, and the demagnetization field is calculated for samples with spherical geometries. The results show high non-uniformity for the demagnetization field inside the sample depending on the sample aspect ratio and the direction of the externally applied magnetic field.
pilot study shows that the majority of these measurements are important to the adoption of ubiquitous commerce. The results will be beneficial to managers and ubiquitous commerce developers when making decisions on the development of the system; and thereby, accelerate the adoption of ubiquitous commerce.

81. Development of a Mobile Pills Framework Nicole Stidley, Hi Tran, Albert Yin, June Wei Department of Management & MIS

This paper aims at developing a mobile pills framework in the electronic healthcare by using mobile information technologies. Specifically, an electronic based framework is developed to show how mobile information technology and information system can be adopted in mobile pills. Then, a set of usability solution items are developed based on this framework. A prototype was created to show the real implementation of a mobile system with these important features. The findings from this paper will be helpful to managers when making decisions on mobiles development.

82. Practicing What We Preach: How Leadership Skills Can Change the Quality of a College Education Anna Covington Department of Management and MIS

Over the years, the management discipline has harbored a rather tenuous relationship with the emerging field of leadership. In Management programs, leadership is thought of as something students should have or develop if they hope to be very successful in their chosen careers, however, the model to which the business model has been extended to the college classroom. Many scholars have argued for the business metaphor in their classrooms by arguing that students should be viewed as “clients or customers as they “manage” student learning. Other scholars propose that students should be viewed as “employees” and college professors as “managers” and that they should apply performance management (PM) techniques to maximizing this valuable resource. I present the professor as leader metaphor as an improvement on the classroom management analogy. I take the position that establishing a psychological contract of mutual expectations will merely tend to promote the status quo, but it should be the professorato’s goal to promote change or improvement in the classroom. I propose to apply leadership values, like change, difference, commitment, trust, credibility and learning as an important addition to the college classroom management-performance metaphor. I believe that professors should be leaders in their classrooms.

83. The Winning Edge Nathania Louis-Pierre Department of Paralegal Studies

Although the right to a jury trial has not changed since the formation of the United States Constitution, the way members of a jury panel is selected and seated has undergone many transformations. The latest of such transformation is the use of Jury Consultants by attorneys to pick a more favorable jury for their clients. This is a cause rather than to pick an impartial jury as the Constitution dictates. This shift in the purpose of jury selection and the use of jury consultants has raised the question as to if the use of jury consultants are a violation of an accused constitutional rights. The focus of my presentation will be to brief highlight the primary constitutional issues posed by the use of jury consultants and to discuss how the Courts and members of the legal field are responding to this issue.

84. Gender Stereotyping by the Media in the 2008 Election Samanatha Adams Department of Political Science

The 2008 election was unlike any other in American history. Hillary Clinton was the first viable female Democrat presidential nominee, and Sarah Palin was the first female vice presidential nominee for the Republican Party. As a result, media coverage of the 2008 election was drastically different from other elections. For the first time, the media had a serious need to focus on female contenders for the two highest offices in the United States government. My research provides an in-depth look at two specific in-depth news coverage. The coverage has shown a gender bias present in print media during this election cycle. The study utilizes qualitative methodology, specifically content analysis, to compare the media coverage of Barack Obama and Hillary Clinton, Joseph Biden, and Sarah Palin. The major finding of my research revealed that only female candidates received gender-specific coverage.

85. The Effect of Partisanship on Women’s Electoral Fortune in U.S. House Races Stephanie Jarrett and Jocelyn Evans Department of Government

This study analyzes the relationship between partisanship and gender in congressional elections. For this analysis, the 2006 and 2010 election results will be used to evaluate the effect of gender and partisanship on candidates’ success in congressional elections. This analysis will examine whether there is a correlation between women’s electoral success and party identification. Preliminary findings suggest that partisanship does play an integral role in women’s electoral viability. In electoral contexts favoring Democrats, Democratic women do better than expected. In electoral contexts favoring Republicans, Republican women do better than expected. This raises important implications for the role of gender in politics generally and congressional candidate evaluations specifically.

86. How to Design, Promote, and Produce a Student-Run Applied Sport Psychology Conference Tanya Nascimento, MA Robert Rotunda, PhD Katy Tran Department of Psychology

Learn about the process of designing, promoting, and producing a student-run applied sport psychology conference from those who have done it. We have tips for success and pitfalls to avoid. Learn how the cooperation between parties at two universities resulted in a successful event beneficial to both. Sport psychology graduate students in sport psychology at Florida State University led a one-day conference hosted by the Center for Applied Psychology out of the University of West Florida. The conference consisted of 15 students who presented with an applied focus, designed to appeal to psychology, exercise science, and sport management majors. We also targeted student-athletes, and athletic department staff at the hosting university. Because the University of West Florida offers a minor in sports and exercise psychology, but does not have a graduate program in sport psychology, this university was ideal for educational outreach in this area. The aim was to increase awareness and understanding of sport and performance psychology, to increase interest in seeking out and utilizing sport psychology services, and to encourage students to pursue sport psychology higher education.

87. Self-Efficacy and Anxiety in Relation to Students’ Future Plans Angelica Sullivan, Dr. Joan Duer Department of Psychology

This study is to determine whether freshmen versus seniors differ on their levels of self-efficacy and anxiety dependence on their post-degree plans (attending graduate school or joining the workforce). The literature supports the hypothesis that seniors will have lower self-efficacy and higher anxiety than freshmen due to their imminent exit from the sheltered academic environment. Similarly, those who plan to enter graduate school will have lower anxiety and greater self-efficacy than those entering the workforce in that graduate school is an extension of one’s academic career, while joining the workforce is an impending event. To test this hypothesis, a questionnaire is created on SurveyMonkey using a modified form of the Computer Decision-Making Self-Efficacy Scale, Short Form (Betz, & Taylor, 1995) and the Adult Manifest Anxiety Scale, Work Pressures version (Lowe, Reynolds & Richmond, 2003). It will be sent in an E-mail through the School of Psychological and Behavioral Sciences to all freshman and senior psychology students.

88. Change Blindness: Can We Determine Its Predictors? Janie Partyka, Leslie Sneeker, Jenny Hasseltine, Carly Robbins Department of Psychology

Visual changes constantly occur in the environment (e.g., changes in traffic, people shifting positions). Change detection is the ability to notice changes in the world around us (Rensink, 2002); it can denote proper detection (i.e., reporting the existence of a change), identification (i.e., reporting the nature of the change), and localization (i.e., reporting where the change occurred). When a change to a scene coincides with another event that disrupts the motion signal, which draws attention to a change, observers often do not detect large changes (Beck, Angelone, & Levine, 2004). This phenomenon, called change blindness, is the difficulty observers have in detecting changes to a visual scene (Simons & Rensink, 2005). This study examined the role of individual differences in attention (e.g., ADHD, boredom proneness, cognitive failures) to predict the ability to detect changes. Undergraduate students completed a change blindness task and were divided in a distraction (completed a simultaneous auditory task) or a no-distraction group (completed only change blindness task). Measures of attention did not accurately predict performance on the change blindness task, however, increased workload created with the auditory task decreased performance. This suggests that although using two separate modalities, multitasking does negatively impact performance.

89. Implicit Sequence Learning Within a Multidimensional Framework Summer Hargreaves, Mallory Wells, and Carline Caitlin Department of Psychology

Humans are capable of learning patterns present in the world both consciously and unconsciously. Learning patterns unconsciously is known as implicit learning. Implicit learning is advantageous in situations where automatic and correct action is required.
or where longer conscious cognitive processes would be maladaptive, such as during an emergency. In this study, researchers asked participants to respond to a sequence of stimuli on a computer screen via four response buttons, using the dependent variable of response time in milliseconds to assess which visual features were most significant to the implicit learning mechanisms of the brain. By presenting the same sequence of stimuli with variations in the visual dimensions using three different features – space, color, and shape – researchers were able to assess if these mechanisms were capable of learning a pattern using all three different features in the same manner. If any combination of features had a particular effect, or if one particular feature overrode the others.

90. The Effects of Perceptual Cues on Inhibitory Ability in Older Adults
Amy L. Underwood, Lisa A. VanWormer
Department of Psychology

The inhibitory deficit hypothesis states that compared to younger individuals, older adults exhibit less efficiency in the ability to filter task-irrelevant information from working memory processes. This study investigates the effect of pre-trial perceptual relevance cues on the inhibitory ability of older and younger adults. Results show that the effect of pre-trial cues differs based on both participant age as well as the semantic content of the task. This suggests that older adults are less able to filter out irrelevant information even with the aid of perceptual relevance cues.

91. The Roles of Visual Short-Term Memory and Working Memory in Change Detection
Sara K. Senkbeil, Amy L. Underwood, Brandon J. Webb, Jared B. Crittenden, Lisa A. VanWormer
Department of Psychology

Under normal conditions, changes to a visual scene result in motion signals that capture attention and allow for quick change detection. However, when changes occur simultaneously with other happenings within the visual scene, such as eye movements or brief blank intervals between views (ISIs), those motion signals are not observed. As a result, large changes to visual scenes often go unnoticed through a phenomenon called change blindness. The contributions of visual short-term memory and working memory to change detection have been evaluated by manipulating changes in visual stimuli (ISIs) presented between views of visual scenes. Specifically, when motion signals are present (i.e., 0 ISIs), visual short-term memory and working memory have no significant effect on speed and accuracy in change detection.

However, when motion signals are masked (i.e., 300, 800, or 2000 ISIs), interesting trends in change detection emerge based on individual differences. These results suggest that performance in change detection tasks can be predicted by individual differences in visual short-term and working memory rather than individual differences in attention.

92. Using Motivations as Predictors of Team Sport Participant Positive or Negative Outcomes
David Hill, Darryl McKinley, and Cynthia Moreno
Department of Psychology

By employing self-determination theory and three measures of outcomes, an investigation was conducted to determine if motivations predicted the outcomes of athletes involved in the team sport of women’s roller derby. Data was collected from 125 athletes, and results suggest that sustained human performance may also be cyclic, with predictable lapses in focused attention occurring, on average, every 1.5 minutes (Arruda et al., 2009). We now believe the 1.5-minute cycle may be a signature of an arousal system that is capable of deflecting performance by expanding attention (Tucker & Williams, 1984). The purpose of the proposed investigation will be to examine the role of arousal in the sustained attention process by using the flash visual evoked potential P2 (FVEP-P2). The FVEP-P2 is a measure of cholinergic functioning in the circumventricular visual cortex. It is predicted that cyclic changes in performance will be accompanied by cyclic changes in arousal as measured by the amplitude of the FVEP-P2 (Prass, Chai, & Jeong, 2007).

93. Spatial Averaging the FVEP-P2: A Reliability Study
Mary K. Hennessey, Elise M. Lullo, Jameson D. Beach, James E. Arruda, PhD
Department of Psychology

The flash visual evoked potential P2 (FVEP-P2) is a prominent component of the visual flash evoked potential. The FVEP-P2 occurs approximately 124 milliseconds after the presentation of a strobe flash and its latency and amplitude have been attributed to the operation of the cholinergic areas of the circumventricular visual cortex – a system known to play a critical role in cortical arousal (Coburn et al., 1993). Unfortunately, the temporal resolution associated with the FVEP-P2, which requires numerous (e.g., 100) stimulus presentations, is much too low for it to be used to study neurocognitive processes such as sustained attention. The purpose of the present investigation was to assess the reliability of the FVEP-P2 when measured (combined) from several adjacent electrode-recording sites. The results of this investigation suggest that fewer than 100 stimulus presentations are necessary to obtain a reliable FVEP-P2 when the FVEP-P2 is averaged across several adjacent electrode-recording sites.

94. Cyclic Variations in Sustained Human Performance
Elise M. Lullo, Mary K. Hennessey, Jameson D. Beach, James E. Arruda, PhD
Department of Psychology

The study of sustained attention has implicitly supported a model of attention as a single resource pool that is depleted over the course of a task. A graphical depiction of the decline in performance, which is often measured as performance accuracy, supports this view (Smith, Valentino, & Arruda, 2002). However, research conducted by this and other laboratories (Smith, et al., 2003) suggests that sustained human performance may also be cyclic, with predictable lapses in focused attention occurring, on average, every 1.5 minutes (Arruda et al., 2009). We now believe the 1.5-minute cycle may be a signature of an arousal system that is capable of deflecting performance by expanding attention (Tucker & Williams, 1984). The purpose of the proposed investigation will be to examine the role of arousal in the sustained attention process by using the flash visual evoked potential P2 (FVEP-P2). The FVEP-P2 is a measure of cholinergic functioning in the circumventricular visual cortex. It is predicted that cyclic changes in performance will be accompanied by cyclic changes in arousal as measured by the amplitude of the FVEP-P2 (Prass, Chai, & Jeong, 2007).

95. The Association Between Sex Education, Age, and Contraception Use at First Intercourse
Stacey Bass and Tamara Powell
Department of Psychology

A correlational study examined the relationship between the presence of sexual education either at home, school, or both and the age at which teenagers had their first sexual intercourse. The behaviors of the proposed investigation will be to examine the role of arousal in the sustained attention process by using the flash visual evoked potential P2 (FVEP-P2). The FVEP-P2 is a measure of cholinergic functioning in the circumventricular visual cortex. It is predicted that cyclic changes in performance will be accompanied by cyclic changes in arousal as measured by the amplitude of the FVEP-P2 (Prass, Chai, & Jeong, 2007).

96. Peer Group Conformity of Academic Achievement in High School Band Programs
Ashley Rotolo
Department of Psychology

Cliques (small groups comprised of 3-4 people) have been the focus of recent research on peer group conformity as well as negative behaviors (smoking, violence, etc.). This study deviates from this focus, observing the conformity of academic achievement of a more expansive formal, school-established peer group, high school band. Two high school band programs, a combined total of 250 participants, were measured on two factors, leadership responsibility and commitment to the program. These measures were used to determine the structure of the group; the greater the commitment and leadership displayed, the more central a member was believed to be within the program. An analysis of participants’ GPA determined conformity variance in relation to group centrality. A social network analysis was also conducted to determine informal cliques within the high school band programs; academic achievement conformity of the cliques was ascertained and compared to the conformity of the band programs.

97. Corelation Study of Idiosyncratic Events and Puberty
Kimberly Rivera
Department of Psychology

The purpose of this study is to determine if a relationship exists between idiosyncratic (non-normative) events and puberty, specifically the onset of puberty and psychological stressors such parental divorce, death of immediate family member, change in schools and other similar items. We will also attempt to determine if there is a relationship between the perception of the idiosyncratic events and the actual physical onset of puberty. Data will be statistically analyzed to determine: 1) any relationship between idiosyncratic events and the onset of puberty, 2) if there is a statically significant difference in any relationship between idiosyncratic events and gender, 3) if a relationship exists between the physiological onset of puberty and perception of the effects of idiosyncratic events.

98. Autonomous Virtual Rover: Using AI to Navigate and Survive in Unknown Terrain
Travis Dimmig, Joel Lorenz, Dr. Eman El-Sheikh
Department of Computer Science

The goal of this project is to assemble an autonomous virtual rover which navigates through and interacts with a simulated environment. A game’s interface will provide the tools necessary for the
simulation. Despite using a game engine to conduct the simulation, we will implement AI methods in an event-driven manner which could also have value in real-world applications if they were implemented on a physical rover. The rover will use data that it receives through sensors in order to acquire targets and form a route to them using the A* search algorithm. It will acquire additional data about the unfamiliar environment while searching for its objective, to improve future navigational performance, and learn from its target’s movement as well in order to better track it. Data will be made available to the rover almost exclusively through sweeping sonar, collision detection, a compass, and a global positioning sensor. The rover’s choice of action will be balanced between three goals with distinct priorities: projectile-avoidance/self-preservation, obstacle-avoidance/navigation, and target-acquisition/aggression. The result of the project will be the development of an autonomous rover to explore an unknown terrain while simultaneously defending itself from enemies and making intelligent counter-attacks.

99. An AI Framework for Maze Navigation in Robotic Environments Zachary Ramirez, Dr. Enan El-Sheikh Department of Computer Science

As more systems become fully automated, there is an interest in being able to quickly traverse an environment. This project focuses on the development of an AI framework to allow a robot to learn its environment and efficiently traverse it, regardless of where it starts. Several AI pathfinding techniques, including A* and machine learning methods will be explored and evaluated within this framework. The goal of the system is to allow a robot to identify its current location, and efficiently navigate to a specified end point with minimal uninformed search or human interaction. The project will establish a code base for future research projects to build upon and evaluate more advanced AI-based navigation strategies.

100. Very Intelligent STock Analyzer (VISTA) Anthony Rabie, Jack Davis, Dr. Enan El-Sheikh Department of Computer Science

Stock investors are everywhere, from large corporate firms to the blue collar worker. Every investor seeks tools or some method to accurately analyze or even predict a stock’s future behavior. In the past, linear regression models were used to predict stock behavior, but stocks do not behave according to a linear formula. The use of AI to learn the relationship between certain factors and the value of a stock can bring us closer to solving the mystery of stock prediction.

This project uses Neural Networks to demonstrate how AI can be used to explore the relationship between financial variables and future stock trends. Our Neural Network (Very Intelligent Stock Analyzer VISTA) will tell us if a stock will increase, decrease, or remain stagnate in value. The results of this project will open doors for further evaluations of stock variables and the use of AI in stock prediction and analysis.

101. Implementing Swarm Intelligence for Solving Complex Problems Thomas Braxton, Dr. Enan El-Sheikh Department of Computer Science

Swarm intelligence is used throughout the world to calculate the best routes for a delivery company or manage the aircraft schedule at airports. Simply put, swarm intelligence is when many “dumb” bots, or ants or fish, work together to solve a complex problem. Using two different algorithms, learning bucket and a committee-style method, in separate instances, we will try to replicate a swarm intelligence that must solve a problem. We will set up a game in which virtual bots must defeat a much stronger enemy. The virtual bots we develop will be able to locate more allies, evade the enemy when outnumbered, and attack when the swarm feels like it can defeat the enemy. The result of this project will be a framework for the exploration of swarm intelligence using AI methods.

102. Virtual Orchestra Cody McDaid

Computer generated music is a very interesting concept. The Virtual orchestra is a project that allows people who have no formal musical skills to play with the virtual instruments and experiment conducting an orchestra. The Virtual Orchestra program allows a user to select any number of available instruments to be in the orchestra. Each instrument that is selected is assigned a number of randomly selected notes within a preset key. The user can then select how many notes should be played. The program will then play randomly selected notes from the selected instruments and their assigned notes. This program utilizes several classes, instrument, orchestraInstrument, creatorOrchestra, and orchestraGUI. An example of the GUI interface is attached. The GUI will display the notes that are assigned when an instrument is selected, as well as display the names of the notes as they are played.

103. Traffic Simulator: A training tool for persons with Autism Billy Abston, Dr. L. Prapaga, Dr. J. Huband Department of Computer Science

In 2009 there were a total of 4,092 pedestrians killed in the U.S. In Florida there were 466 (NHTSA). It is my desire to create a simulator that will help persons to practice safe street-crossing habits in a controlled virtual environment before practicing in the real world. This type of simulation has been done notably at the University of Haifa by (Josman et al.). I intend to enhance this by using immersive technology of 3-D and motion sensing provided by the University of West Florida. It is my desire that I will be able to create a working simulation and deploy it into the community and help children develop necessary life skills.

104. Argos Glest: Ambitious AI Automating Annihilation(Intelligent Game Play Using AI) Titus Breaster, Patrick Brozen, Jason Graves Krag McGonagly, Dr. Enan El-Sheikh Department of Computer Science

The goal of this project is to create an Intelligent Player for the RTS (Real Time Strategy) game Glest that utilizes Artificial Intelligence techniques to create a competitive AI agent that can challenge human players. Glest is an open source game where anyone is free to use the existing code and modify it; freedom makes it a prime choice for a research group. Our agent will take information from the environment and use this to select its strategy. We will be playing our agent against the game’s current agent to have a consistent baseline to test against. We will monitor the AI’s performance during each game and attempt to make any modifications within the techniques it is using. Over time, we will be creating more complex and effective tactics for our agent to use against its opponents and have it play human opponents to provide a truly challenging game experience. This project will provide a framework for the exploration of AI methods for more intelligent and adaptive gameplay. The framework will establish a code base for future teams to build upon to develop and evaluate more advanced AI-based game tactics and strategies.

105. Optimizing Best-Case Performance in WoW Using AI Andre King, Dr. Enan El-Sheikh Department of Computer Science

The goal of the project is to create an AI system which uses a Genetic Algorithm to generate abilities which can be used to produce optimal play in the game World of Warcraft. It is not possible for the execution of the AI system to be controlled in real time as the player takes the actions. Instead, the AI system is trained using data from players attempting to follow the AI system’s commands. The system is then able to play well and this improves the performance of the player. The system is trained using real data from players attempting to follow the AI system’s commands. The system is then able to play well and this improves the performance of the player. The system is trained using real data from players attempting to follow the AI system’s commands. The system is then able to play well and this improves the performance of the player.

106. Let’s Make Music Generating Music Using Artificial Intelligence John Consor, Dr. Enan El-Sheikh Department of Computer Science

The goal of this project is to discover algorithms for use in the generation of “beautiful and moving music.” There have already been many successes in this field (Cope 1996; Lichterwalt, Zarora, Chawla, 2008) but there is much room for improvement and original research. Our methods include Markov chains, Bayesian Networks, and cluster analysis. These methods are applied to a large corpus of training materials, including the symphonies of Beethoven, Mozart, and Bach, and generate new songs in the style of the legendary composers. The project is an interactive environment for the generation of music, as well as many tools to aid in the process of visualizing and understanding the algorithms used.

107. Much Ado About Dramaturgy Sheila Mettetal Department of Theater

As a dramaturg for Pensacola Shakespeare Theater’s production of Much Ado about Nothing, my task was to focus primarily on the time period in which the play was set, 1455. I did my best to provide the knowledge of the time that people living then would have accumulated historically, as well as culturally, economically, and observationally. The packets given to the cast and crew contained initial key facts to establish the culture the characters would be in. We walked through World War leaders that would have dominated headlines were given a background, important battles that would have taken the lives of loved ones were addressed, and life-changing events starting from World War I adding up to the second World War were narrated. The characters were also provided with resources to understand their individual walks of life. In addition, we provided costumes and headshots of actors, as well as shown videos of important speeches and events. Music of the time period was compiled into various playlists to which the cast could listen and enjoy. Pictures and illustrations would be able to act again. The results of the system will be compared to brute-forced optimal ability use as well as average player’s ability use to evaluate the system’s performance. In addition, data from players attempting to follow the AI system’s commands may be gathered as a further means of evaluation. For legal and other reasons the system will not be capable of actually interacting with the game world, so its damage will be calculated using known formulas for the game rectify. If successful the system could be combined with other systems which could provide it with an environment to actually execute its output in the game world, producing an agent which plays World of Warcraft as a human would - hopefully even better.
of leaders, events, everyday people, Navy men, and other helpful subjects finished the packet in order to make a visual connection with all that was presented in previous pages.

108. Double Vision: A Novel
Theresa C. Kemp
Department of English
This presentation showcases the character and plot elements of the manuscript Double Vision. Using writing techniques to develop characters and plot, this novel will showcase my talents as a writer. In order to illustrate the use of my techniques, character sketches for the main characters and a plot synopsis will be provided. The novel falls into the thriller genre. The novel centers around two brothers, Ian and Ryan Vestige. Ian tinkers around with computer technology and has made a name for himself as a video game genius and will not disappoint. The novel will showcase my talents as a writer. In order to illustrate the use of my techniques, character sketches for the main characters and a plot synopsis will be provided. The novel falls into the thriller genre.

Presentations & Performances

Camp Fire USA Public Relations Plan
Tiffany Elise McWilliams
Department of Communication Arts
This honors thesis will compare an effective eight step public relations plan, along with a brief history of the Camp Fire USA branch in Milton, Florida. It will include a press release, a journal article, a flyer, and a poster. The plan is executed by researching and examining current public relations experts, in the field, and information pertaining to the Camp Fire USA organization. I intend to produce a plan that can be used to educate and inform public citizens in the Milton, Florida area of Camp Fire USA’s services and activities.

Rhetorical Criticism of the Exclusion of a Lane Bryant Commercial Ad
Kristen Rowland
Department of Communication Arts
This submission is a speech that aims at explaining a situation that happened in the world through the lens of a communication theory, in essence a rhetorical criticism. The speech uses the communication theory written by Rosalind Gill entitled Sexism/ Empowerment: Figuring Female Sexual Agency in Modern Advertising published in the 2008 Feminism and Psychology to explain the censorship of a lingerie commercial ad produced by Lane Bryant, a clothier that caters to full figured women, by the FOX and ABC news stations. The speech draws critical implications about the portrayal of women in advertisements and asks the question of why the Lane Bryant Ad was censored when Victoria’s Secret Ads are celebrated by the media. Using Gill’s lens as a comparative analytic framework the presentation provides great insight into our societies discomfort with average size women being displayed in the media.

Gubernatorial Power in the Face of War: Applying Bleye’s Scale of Gubernatorial Power to Study Possible Effects of the Civil War and Reconstruction on Executive Power in the South.
Rebekah Johansen
Department or Government
This study applies Thad Bleye’s scale of gubernatorial power (Bleye 1968, 541, and Grey, Jacob, and Vines, eds., 1983, 180-221), which measures gubernatorial power in terms of institutional and personal powers, to the issue of Southern gubernatorial power. Understanding levels of gubernatorial power is essential for understanding the functions of State governments and American federalism in general. And understood aspect of gubernatorial power is the topic of regional differences in light of the Civil War and Reconstruction. Are there real power differences between Souther and Northern states, or are various power levels dependent on perception alone? Can power disparities be seen as a matter of coincidence, or can inequalities be traced back to Reconstruction. Such questions are examined from a qualitative, case-by-case perspective and from a quantitative, global perspective. The goal of this study is not to make any global conclusions regarding the relative wisdom of the Civil War, Reconstruction, and those events' various aspects. Rather, this study aims to apply Bleye’s scale as it has not been applied before, in order to discover the impacts of the United States' most significant domestic event on what is perhaps its most significant domestic office.

"Louder Than Words"
Leah Artigon, James Mitchell, Kate Bollone, Toni Bonaccorsi, Ruben Diaz, Erin Finnegan, Rashawnda Foster, Chris Frazier, Lauren Johns, Savannah Sinnerly
Department of Musical Theatre
We are submitting an ensemble piece from the musical Tick, Tick...Boom! The music and lyrics are by Jonathan Larson. This was taken from our Second Annual Musical Theatre B.F.A. Recital. It was directed by Leah Artigon, musically directed and accompanied by James Mitchell, and performed by Kate Bollone, Toni Bonaccorsi, Ruben Diaz, Erin Finnegan, Rashawnda Foster, Chris Frazier, Lauren Johns, and Savannah Sinnerly. The recital was based on the philosophy that actions speak “louder than words”. Each student was encouraged to approach this standard acting technique from outside of the box. Based on their own personal inner drive, each student chose an action verb which identifies an object that is important to each of them based on the “given circumstances” of their own lives. This piece was the conclusion.

Maternal Attachment Style and Family Interactions
Stacey Bass
Department of Psychology
A correlational study examined the relationship between a mother’s attachment style and any degree of child neglect that adult children felt while they were growing up. The degree to which the mother felt neglected was also studied. By means of an anonymous survey, 34 students and their mothers answered questions on the Experiences in Close Relationships questionnaire and questions on the Neglect Scale. The mothers were also asked questions from the Mother-Child Neglect Scale. The study hypothesizes that mothers who do not have a secure attachment are at a higher risk for neglecting their children. It was also hypothesized that mothers who neglect their children were more likely to be neglected themselves as children.

A Lesson In Love
Brandy Hooper and Jessica Benitez
Department of Theatre
Musical Theatre majors Jessica and Brandy will perform musical theatre pieces that all deal with the idea of love. The first piece is “I Still Believe” from the show Miss Saigon. This song deals with two women longing for the same man. Next, Jessica will sing “What Did I Have That I Don’t Have” from the show On A Clear Day You Can See Forever. This song is about questioning what made her lover change his mind about her. The final piece is “What You Don’t Know About Women” from the show City of Angels. This song is about two women taking a stand against unfaithful lovers. We wish to portray a message that all relationships should be equal and honest.

Selected scene(s) from Moliere’s comedy Tartuffe
Nicole Dickson and Keegan Stull
Department of Theatre
Written in 1664 by French playwright and satirist Moliere, Tartuffe or Tartuffe ou L’Imposteur, (Tartuffe the imposter or the hypocrite) is recognized as among the greatest examples of French Farce. This semester for Acting 3 students studied the genre of French Farce concentrating on the play Tartuffe. Since study has been given in this genre, it follows that scene work should be performed from this play as an example of the Theatre Department’s work this spring for the student symposium. The scene selected for performance is Act 3, Scene 3, between Tartuffe (title character) and Elmire, (the lady of the house); the scene is Tartuffe’s attempted (failed) seduction of Elmire.