HONORS COLLABORATIVE PRESENTATION ABSTRACT

Cousar, Matthew; Dyer, Tiffany; Gibbs, Ashley; Karako, Susan; Kinsella, Devin; Le, Thuy; LeCompte, Amanda: Quintana, Seth; Raley, Katherine; Stone, Robin, INTIMATE UNIONS: THE ETHICS AND POLITICS OF MARRIAGE

FACULTY SPONSOR: Rev. Anthony E. Giampietro, C.S.B.,

Marriage: why does it matter? Sex: what is it for and why does it have so much power over us? Many of the problems in our society can be traced back to breakdowns in intimate relationships. Due to the widespread instability of such relationships, the traditional view of marriage is surrounded by pessimism and doubt, as evidenced by prenuptial agreements, no-fault divorces and wedding vows that shy away from a promise of permanence. More and more, individuals in our society are choosing alternative forms of relationships that deviate from traditional models. The question is: should one aim to achieve a lifelong relationship? If so, how does one attain such a relationship in a fulfilling manner, and how does the sexual drive fit into the picture? Our presentation will explore the progression of attitudes about marriage, the nature of relationships in regards to what individuals contribute to them, psychological reasons for sexual promiscuity, sex and marriage in relation to society and the transcendent, marriage preparation, fidelity, love and marital roles, all in an attempt to support the institution of marriage as the model for fruitful intimate relationships.

Abstracts of Presentations (Alphabetical Listing by First Author)

Alves, Charlene, THE ANTEBELLUM AFRICAN METHODISTS EPISCOPAL CHURCH WHAT DID THE A.M.E. DO TO ELEVATE THE SPIRITS OF AN ENSLAVED AND DISFRANCHISE RACE? Dr. Joseph McFadden, History

In the seventeenth century, they came to the American colonies as indentured servants; the color of their skin made them perpetual slaves. Slavery became a means of production, a form of labor as the quest for land expansion and economical demands escalated. The slave had been transported to the American colonies, where they were forbidden to openly embrace their former way of life or to participate in the religious practices of their ancestral culture. During the eighteenth century, blacks came to adopt Christianity, Methodism, which would awaken the souls of an enslaved and disfranchised race. The political and religious unrest of the North and South would cause a schism dividing the Methodist Church, that combined with racial mistreatment would force the blacks to reject the Methodist Episcopal Church. Realizing the need for separate spiritual enlightenment, Richard Allen in 1816 would come to establish the African Methodists Episcopal Church. The A.M.E. would bond its people, in the North and the South, together providing a defense mechanism for their survival with the promise of spiritual freedom. My premise is to briefly examine the rise of the A.M.E. More importantly, to analyze how the A.M.E., a visible and viable institution in the North, was able to spiritual uplift its enslaved members in the South. How was this invisible thread able to keep hope alive for its enslaved members, who were engaged in and endured the day-to-day existence of slavery?

‡Arsenault, Rachael, MEASURING THE EFFECTS OF THE LOCUS OF CAUSALITY ON PATIENT SATISFACTION AND HEALTH-RELATED BEHAVIOURS: DOES THE DIRECTION OF ATTRIBUTIONS MATTER? Dr. Dave Korotkov, Psychology

Various predictors of patient dissatisfaction have already been established within the doctor-patient relationship. Further, several researchers have linked such dissatisfaction to specific consequences (e.g., the filing of complaints, the failure to adhere to medical advice). One relationship in this area of study that has not been extensively studied is the relationship between the direction of attributions regarding a doctor's negative behavior and patient dissatisfaction and behavior. By manipulating attributions (i.e., dispositional vs. situational vs. control) and by providing participants with scenarios regarding a doctor-patient interaction, this study will attempt to determine the effects of attributions on patient satisfaction and health behaviours in a between-groups experimental design.

Avalos, Raul David, AN ANALYSIS AND COMPARATIVE STUDY OF IMMIGRATION INTO THE UNITED STATES AND SPAIN: BORDER CONTROL AND IMMIGRATION POLICIES, Dr. Mehdi Noorbaksh, International Studies

At the start of the new millennium the world was faced with considerable challenges including the needs of a growing population. After the terrorist attacks of September 11th 2001 as well as the bombings of the Atocha train station in Madrid, many immigration policies within Spain and the U.S. were discarded and new policies came into play to attempt to curb the flow of immigrant population. The argument of this study is that immigration policies and procedures of the U.S. and Spain are largely inefficient thus stunting the development of the domestic work forces. This study will look at the U.S. and Spain's current immigration policies, border control, and statistics. First; a look at statistics and previous surveys will give the subsequent sections their needed support. This will include a look at the number of migrants, any fluctuations in their numbers and their point of origin. Secondly; the study will look at the border control in both countries and their efficiency. Lastly, it will look at the current policies in both these countries and the need of revision in the hopes to secure a multifaceted workforce, as well as securing the safety of its citizens. Due to the current immigrant situation in the U.S. and Spain, it is imperative that both nations are considerate to the incoming immigrants. The expected result from the study is that both countries will need some revision of immigration policies in order to be adaptable, secure their borders and maintain a versatile workforce.

Avila, Laura, SPAIN'S HIGH UNEMPLOYMENT, Dr. Debra Andrist, Spanish

The constant unemployment increase in the European Union in the last two decades has caused Spain to have the highest unemployment rate there. Several factors affect the Union's economy, yet Spain possesses 24.4 percent, while neighboring country, Portugal, with only a 6.8 percent. Several conclusions are drawn which help explain Spain's economical decline. Spain spent much of the 20th century under the rule of dictator Franco and in 1974 fought a revolution with Portugal, causing its economy to flourish only within the past decade. Spain also provides good quality, protective unemployment benefits that protect its citizens while out of a job, perhaps discouraging its people from looking for employment. There is a wide range of potential factors causing Spain's unemployment that requires further investigation. Yet, these are a few that may give some explanation. Spain's lack of employment opportunity keeps many of its brilliant minds from shining through.

Avila Jr, John, ACTIVATION OF GENE EXPRESSION IN MOUSE EMBRYONIC CARCINOMA CELLS BY BHLHB4, Dr. Debra Bramblett, Biology

Transcription is the creation of messenger RNA, the blueprint of proteins, from a DNA template. Basic helix-loop-helix (Bhlh) factors are proteins that bind to a specific DNA sequence, CANNTG, which may be present in the regulatory region of a gene. Transcription factors, like Bhlhb4, regulate transcription by dictating the rate and period of time a gene is expressed. In animal development, Bhlhb4 plays a key role, especially in the developing brain, pancreas, and eye. Also, it is a tissue specific factor that dimerizes with a ubiquitously expressed Bhlh factor (such as E-47) to form a heterodimer. The object of this study is to determine how Bhlhb4 regulates gene expression. The molecular biology technique, known as transfection, was employed in order to study the effect of bhlhb4 in murine embryonic carcinoma p19 cells. Transfection involves the introduction of DNA into eukaryotic cells for the purpose of analyzing protein activity. To investigate the activity of Bhlhb4, we analyzed the protein expression of an artificially engineered gene (3xRIPE-LUC). We believe that greater amounts of Bhlhb4 increase the expression of particular genes, including the engineered reporter. In previous studies, it was found that Bhlhb4 acted as a repressor and decreased expression in HIT and Hela cells. Results in this experiment point to another conclusion. In p19 cells, Bhlhb4 acts as an activator. Future studies will focus on the effect of mutant Bhlhb4 genes as well as the effect of Bhlhb4 upon differentiated p19 cells.

Ayad, Christina, THE SOHAG MASSACRE: A CASE STUDY OF RELIGIOUS PERSECUTION OF CHRISTIANS IN EGYPT, Prof. Livia Bornigia, Communications

The Sohag Massacre: A Case Study of Religious Persecution of Christians in Egypt. On January 2000,

twenty-one Coptic Christians were brutally massacred in the village of El-Kosheh, Sohag, about 300 miles south of Cairo, Egypt. Although a significant amount of time has passed since the incident took place, no one was convicted for the killings. Coptic organizations accused local authorities of cover-up and direct involvement in the murders. While much media attention is directed toward issues of peace, terrorism, war, and women's rights in the Middle East, none has shed light on religious persecution of Christians in many of these Middle Eastern countries. This case study aims to create public awareness concerning the persecutions of Christians in Egypt and to instigate the audience to take an active role in its prevention. Regardless of one's denomination, religious freedom is an essential right that must be respected by citizens and governments alike.

Ayad, Martina; Kusters, Isabelle; Schwartzenburg, Danielle (THE EFFECTS OF PH AND ION-INTERACTION REAGENT ON THE HPLC SEPARATION OF BENZOIC ACID, 4-HYDROXYBENZOIC ACID, AND ETHYL PARABEN, Dr. John Palasota, Chemistry

Preservatives can be classified into one of three categories: those that inhibit growth of bacteria, yeasts or molds (antimicrobials); those that slow air oxidation of fats and lipids (antioxidants) that cause rancidity; and those that block the natural ripening and enzymatic processes that continue to occur in foodstuffs after harvest. In this work, we investigate the effect of mobile phase pH and ion-interaction reagent concentration on the separation of two antimicrobial preservatives, benzoic acid and ethyl paraben, and 4-hydroxybenzoic acid. Future work will test the methods by quantifying the preservative content of various commercial products.

Ayeras, Ara; Trevino, Jeanette; Dao, My; Gifford, Armel; Dacak, Vincent; Nguyen, Nam; Avila, John Jr., ISOLATION OF BHLHB4 HOMOLOG FROM DANIO RERIO BY POLYMERASE CHAIN REACTION, Dr. Debra Bramblett, Biology

The bhlhb4 gene codes for a basic helix-loop-helix transcriptional factor known to be involved in vertebrate retinal development (Bramblett, 2004). Our objective is to isolate and clone the bhlhb4 gene from danio rerio (zebrafish) tissue. To isolate the bhlhb4 gene, a polymerase chain reaction (PCR) was performed, amplifying a sub-fragment of the bhlhb4 coding region. Zebrafish genomic DNA was used as the template for the PCR reaction. The zebrafish bhlhb4 nucleotide sequence was acquired from the Ensemble database, utilizing the ensemble accession number presented in the paper by Adolf et al. The zebrafish sequence is believed to correspond to the homolog of the mouse bhlhb4 gene based on a pairwise sequence alignment of the translated amino acid sequences using the ClustalW alogorithm. Synthetic oligonucleotide primers used in the PCR reaction were designed based on the ZF-Bhlhb4 sequence derived in silico. The resultant PCR fragments of the bhlhb4 gene will subsequently be inserted into DNA plasmid vectors and replicated by using competent E. coli bacterial cells. The success of this experiment will be based on the sequence of the recombinant sub-clone. Thus, the sub-clones will be sent off site for DNA sequencing. If the sequence is correct, the sub-clone will be utilized in an additional experiment, where it will be used in the preparation of RNA probes for in situ hybridization, a labeling technique that locates the expression of specific genes in vivo. This will be performed on zebrafish embryos at several developmental stages that we have harvested in the UST Biology laboratories.

Baihodjoeva, Jibek, THE ASIAN FINANCIAL CRISIS: THE ROLE OF THE IMF AND THE PRESCRIPTION FAILURES, Dr. Mehdi Noorbaksh, International Studies

The financial crises in last past decades have shown that international cooperation is not only a need but also a must. The roles of international organizations, such as the IMF have impacted many aspects of development, especially in building of stronger financial institutions. In the decades before the Asian financial crisis, South Korea, Thailand and Indonesia experienced sustained economic growth based mostly on product export, productivity gains and investment. The Crisis that began in all these three countries was precipitated by serious shortage of foreign exchange that caused the value of currencies and equities to fall dramatically. Difficulties arose primarily from a combination of macroeconomic imbalances, external developments and weaknesses in financial and corporate systems. The argument of this paper is that increased IMF solution in this regard has not shown any policy improvements: therefore enforcement of the rules by the IMF in Asian countries should have been considered cautiously and

implemented more effectively. This paper will look at the cause and effects of Asian economic crisis of 1997; it will then focus on the issues of macroeconomic imbalances, external developments and weaknesses of financial and corporate systems in these three countries. Secondly, this paper will address the compromises and strategy of the IMF policy crisis resolution prescription. Finally, this paper will argue that the IMF prescription was flawed because it did not address the issue of moral hazard, and it applied a one size fits all prescription that failed to adequately address the pertinent problems in these cases.

Becan, Rebecca, OUR FATHER WHO ART IN HOLLYWOOD; EXPERIENCING GOD THROUGH POPULAR AMERICAN FILM, Sr. Paula Jean Miller, Catholic Studies

Modern Movies have encountered criticism from the Christian world. The unique power of films, however, can be implemented to iintroduce, lluminate and encourage theological truths to Christians and non-Christians alike. Transformative Christian symbols are at work beneath the surface of popular mainstream films.

Beltran, Melanie, OPERATION BARBAROSSA, Dr. Lee Williames, History

I will convey to the reader: military tactics, WWII, and plans of the invasion of Soviet Russia through the execution of Operation Barbarossa. This paper will also give a summary of the causes of WWII and the leaders that greatly effected and changed the course of the war. I will describe causes of WWII, the countries of Soviet Russia and Germany's history to foretell the coming events during the time. Describe economics, lifestyle, foreign policy, and circumstances of the era. Go into detail on Stalin and Hitler's effect of their country and why each of them underestimated the other. I will explain in detail the Soviet-German Non Aggression Pact of 1939 and why the goal of lasting peace for ten years failed. Furthermore, I will discuss failure of the German armies North, Central, and South to capture Moscow, including weather and supply conditions that prevented German execution of Operation Barbarossa. Finally, I will go into detail on the tactics, military strategy, and failure of Operation Barbarossa.

Blancas, Melissa; Clark, Rachel; Avalos, Christian, *IN SITU* LOCALIZATION OF BACTERIAL ENDOSYMBIONTS -- THE GLASSY-WINGED SHARPSHOOTER, HOMALODISCA COAGULATA, Dr. Rosemarie Rosell, Biology

Glassy-winged sharpshooters (GWSS) are insect pests of grapes and have caused millions of dollars in damages to the California wine industry. They transmit a bacterial pathogen that causes Pierce's disease, which kills grape vines. In addition, GWSS have an organ called the bacteriome, which houses symbiotic bacteria necessary for insect survival. The bacteriome, located in the ventro-lateral anterior portion of the abdomen, is made up of two parts, one smooth and reddish organ and another which is glandular and yellow. Our previous studies have shown, using transmission electron microscopy (TEM), that the bacteriome houses three morphological forms of bacterial endosymbionts; two spherical forms which differ in size and one larger, highly pleomorphic form that often appears elongated. In this study, we have used various fluorescently labeled rDNA probes in conjunction with in situ hybridization and laser scanning confocal microscopy to verify the identity of the bacterial species. Although some bacteria identified belonged to the ?- and ??proteobacteria phyla, our data indicated that the majority of the eubacteria present were members of the ?-proteobacteria. In addition, we found that members of two bacterial species, Candidatus Baumannia cicadellinicola (?-proteobacteria) and Candidatus Sulcia muelleri (phylum Bacteroidetes), were also present in large numbers in the bacteriome. The later has also been identified in a closely related species. Homoladisca lacerta. These data are essential to our future work that will focus on correlating the ultra-structural morphology with the species identification by using the same probes for in situ hybridizations at the TEM level.

Brennan, Denison, CAN APPLE MAINTAIN EXPONENTIAL GROWTH/IS APPLE OVERVALUED? Dr. Barry Willbratte, Finance

We propose to present expanded results of an ongoing study of Apple Computers, a uniquely innovative company, which has been a leader in computer technology. After falling behind, Apple has had a successful resurgence. The highly cyclical history of this firm makes it an interesting case study. Apple's

revival is a result of an introduction of a product completely outside its traditional line of business. The invention of the iPod and Apple's other mainstream music business compile more than 39% of total revenue. Since entering this production, it has proceeded to almost be a non-computer based company. Accordingly, we plan to discuss the history, competitive position, and culture of this unusual firm, and complete the project with a financial analysis. Our outline of the project is as follows: I. History of the Industry: A. Apple's History: Technological Climate that created a demand for Apple and the personal computer: Mac and Xerox PARC: Steve Jobs History with Apple. B. Apple's Competitive History (Brief)-Hardware and Software: Apple 1 to the Newton: Mac OS Software: LISA (Attempt at Business Computing). C. Personal Computing Industry's Competitive Response. II. Apple: Current Initiatives and Successes: A. What is Apple doing now?: Example: Intel chips: Example: Business with Disney: Example: iPod. B. Industry Response. III. Financial Analysis: A. Financial Analysis of Apple: Debt Ratio. TIE, Inventory Turnover, Total Asset Utilization, Profit Margin on Sales, Return on Common Equity, PE Ratio, Dupont Equation, Return on Assets, and Liquidity Ratios. B. Apple's competitors in Hardware (Personal computing and entertainment): Dell, Gateway, IBM, etc. C. Apple's competitors in Software: Microsoft, Oracle, Sun Microsystems, etc. IV. Conclusion- Can Apple sustain exponential growth, and, if so, for how long?

Brownell, Colleen; Prihoda, Nathan; Wells, Annie, COGNITIVE REACTIONS TO POLITICAL INFORMATION, Dr. Carl Scott, Psychology

People are remarkably adept at maintaining their prior beliefs despite contradictory information. Researchers have demonstrated this biased assimilation with both scientific and political information. Additionally, people have remembered belief-consistent information better than belief-inconsistent information. We examined biased assimilation effects on memory and judgments of arguments in a 2004 presidential debate between Bush and Kerry, using debate transcripts and a CSPAN video, Our first study examined subjects' reactions to the transcript version of the debate without the names of the candidates, identified as Candidate 1 and Candidate 2. We found evidence consistent with biased assimilation; subjects who favored a candidate remembered relatively more strong arguments and fewer weak arguments for their favored candidate than for the other candidate. Conservative subjects remembered fewer arguments in general than did the more politically liberal subjects. A second study randomly assigned participants to either watch side-by-side video segments or read a transcript of the third 2004 presidential debate. We found that judgments of Bush's performance were more closely tied to political affiliation than were judgments of Kerry's performance. Debate viewers generally gave lower performance evaluations than did readers of transcripts. We replicated prior studies and found the biased assimilation effect. Unique to this study was our comparison of video and transcript sources, use of an anonymous transcript, and the recall measure, rather than only a global rating of arguments. One interesting application might be to have raters evaluate edited, anonymous transcripts to judge the winner of a debate.

Brownell, Colleen; Kinsella, Devin; Nguyen, Kathy; Wells, Annie, ASSESSING THE PSYCHOMETRIC PROPERTIES OF JOB SATISFACTION, Dr. Ly Phan, Psychology

In this report, the researchers examine the psychometric properties of two scales measuring job satisfaction and job stress. The Abridged Job Descriptive Index (Russell, Spitzmuller, Lin, Stanton, Smith, & Ironson, 2004) measures the extent to which the employee is content with the following dimensions of their job: work on present job, present pay, opportunities for promotion and relationship with their supervisor. Job stress is measured using the Stress in General Scale (Ironson, Smith, Brannick, Gibson, & Paul, 1989). This scale measures the employees' perceived tension toward their workplace. For this study, we will survey 960 full-time employees from businesses in the Greater Houston Metropolitan Area including both male/females, ranging in ages from 18 to over 60 years of age. Preliminary reliability analyses of the job satisfaction index, job stress and job in general showed a Cronbach's Alpha of .841, .825 and .849 respectively. Additionally, an overall reliability analysis that included the above three indices resulted in a Cronbach's Alpha of .823. Within the job satisfaction index, there are four subscales; each of these was tested for reliability as well. The individual subscales are as follows: work on present job, present pay, opportunities for promotion and supervision, scoring Cronbach's Alpha of .676, .788, .845 and .745 respectively. Suggestions for future research will be discussed.

Burkitt, Amanda; Glenn, Nene; Hernandez, Fatima; Lemus, Jeniffer; Perez, Tanya, CONTINUING THE LEGACY, Dr. Leslie Haugen, Business Administration

Many of us remember the day we graduate, whether it is from kindergarten, high school or college. We recall the fierce pride we felt from a job well done. Graduates of Open Door Mission (ODM), a Christian relief and rehabilitation shelter serving the homeless, addicted and destitute men of Houston, share this satisfaction of completion when they graduate from the nine-month Alcohol/Drug program. In order to nurture these feelings of pride and remain in contact with the organization and other graduates, people join ODM's alumni association. Currently, ODM has an alumni association in place, but our analysis indicates it to be a fragile one. There are several problems that need to be addressed in order to revive the alumni association, and encourage more graduates to become involved. In order to fully understand the business environment surrounding the alumni program, a S.W.O.T. analysis was conducted which identified the strengths, weaknesses, opportunities and threats of ODM. A survey of current ODM students was also conducted to uncover what students wanted from an alumni organization. The SWOT analysis and the survey provided the foundation for our alumni program recommendations. The recommendations we propose will require a firm commitment from ODM, but we believe that they are vital to the development of a solid alumni structure and to ensure that the legend of the Mission lives on in the hearts of Houston's homeless.

Castillo, Dina D., Propst, Roseann, E. SALEM WITCHTRIALS FROM PAST TO PRESENT, Dr. Virginia Bernhard , History

In seventeenth-century Salem, Massachusetts, "Witch" meant death for one accused of witchcraft, but throughout the centuries the meaning of the word "witch" has changed. For children and adults it has come to mean a costume for Halloween, a character in a book, movie, television show, and even lyrics in songs. Time has changed the meaning for the word "witch." Our culture has taught us to no longer fear the word, since the changes our society has given different meanings to it. We have come to accept the word "witch" as something that scares us in an entertaining way, but we have accepted the fact that it is just that, entertainment and nothing more. Yes, there are people who claim to be witches but we consider them in terms of 'Wicca,' or a witchdoctor, or Shamanistic healer. We do not fear these people any more because the meaning of the word "witch" has changed and continues to change. This project shows the fear of the word "witch" from the Salem witch trials of 1692 and how images of witches have changed over time..

Ching, Tiffany, THE ASIAN- AMERICAN COMMUNITY'S IMPACT ON URBAN ECONOMIC GROWTH AND LOCAL POLITICS, Dr. Jon Taylor, Political Science

This paper investigates the impact of the Asian-American community on urban economic growth and the resulting impact on local politics. Specifically, it is hypothesized that when controlling for education, income levels, and age, the Asian-American community has a positive economic impact -- and a related political impact -- that is quite disproportionate to its relative size within the U.S. population. The paper tests the hypothesis by assessing the economic and subsequent political impact of Asian-Americans in Houston. The paper offers conclusions about the economic and political impact that other, relatively cohesive and ethnically-distinct communities, may have in the future in both newer and older urban areas.

Christoferson, Michael, REERS OF KEMPE AND ARMIN, Dr. Charles Krohn, English

Operating under the premise that William Shakespeare created characters to suit the actors portraying them, this research project will endeavor to illustrate how the role of the fool evolved from a "country bumpkin" when portrayed by William Kempe to a more sophisticated character when portrayed by Robert Armin. The purpose of the project is to provide a synthesis of information concerning Shakespeare's fools, since most of the existing published work on this subject focuses exclusively on either Kempe or Armin.

Chung, Amy, PERCEPTION OF MINORITY AND CULTURAL DIVERSITY, Dr. Ly Phan, Psychology

Since the 1940s, job satisfaction has been greatly studied by researchers in many different fields of management. Mitchell and Larson (1987) and Rice et. al. (1991) have shown that over 3,000 studies on job satisfaction have been completed over the last sixty years. The analysis is focused on the views of the employees obtained from their responses on the survey given. I hypothesized a positive relationship between the extent to which the organization provided cultural sensitivity education and (a) participants' perception of minority as being equally productive and (b) participants' positive attitude toward cultural diversity. Approximately 960 full-time employees were invited to voluntarily participate in this study and responses from 102 participants were used for the preliminary analyses. A list of diversity practices employed by an organization was adapted from several different surveys such as the Diversity Practices Survey, the Attitudes Toward Diversity scale, and the Abridged Job in General and Stress in General. The internal consistency alphas range from .82 to .87. Positive correlation was found supporting hypothesized correlation between the extent to which the organization provided cultural sensitivity education and (a) participants' perception of minority as being equally productive and (b) participants' positive attitude toward cultural diversity (r(77) = .312, p < .01, and r(79) = .385, p < .01, respectively). Discussion and suggestion for future research was included.

Clarke, Cassandra, UNTITLED THING, Dr. Janet Lowrey, English

My project is a collection of short fiction through which I hope to explore the complex and often difficult nature of human relationships and interactions, in particular those of the male-female variety. My intention is to explore these interactions on a microcosmic level by focusing my attention only on one or two characters trapped in simple and seemingly small and unimportant situations. The working title of my project is "Untitled Thing," and the stories vary in length but are, on average, about ten pages each.

Collopy, William, FLEET DISTRIBUTION IN SUPPORT OF STRATEGY: THE ROYAL NAVY WITHDRAWS ITS CARIBBEAN CRUISER SQUADRON, 1904, Dr. Joseph McFadden, History

When the Royal Navy withdrew its 6-ship cruiser squadron from the Caribbean in 1904, it effectively ceded strategic control of the region to the United States. Britain was not acknowledging its colonies in the region were no longer important. Rather, redeploying the warships was representative of a shift in that storied nation's naval strategy and in its relationship with the United States. Britain, long dominant in global trade, faced a new reality. Emerging powers such as Germany, Japan and the United States were now commercial and military rivals. As a result Britain was drawn into a naval arms race of unprecedented magnitude. Underlying this global dynamic was the strategic thinking of men like Vice-Admiral Philip H. Colomb, RN and Captain Alfred T. Mahan, USN whose treatises redefined the role of sea power. They attracted numerous adherents, among them even Germany's Kaiser Wilhelm II who is known to have read Mahan. In the midst of all this arose British Admiral Sir John Fisher, an outspoken critic of the Royal Navy. Fisher looked to transform the organization into a fighting navy that reflected the realities of the changing world. He encouraged his officers to study modern warfare and pressed for deploying warships in a way that ensured instantaneous readiness for war. In 1904, one month after assuming the duties of First Sea Lord, Fisher ordered the Caribbean squadron reassigned to Gibraltar as part of the Atlantic Fleet. This research explores the factors that influenced his decision.

Counts, Jessica, WHEN TWO BECOME ONE: A SERVICE LEARNING INTEGRATION OF CULTURES, Sr. Paula Jean Miller, Catholic Studies

In today's world, there is a constant mingling of languages and cultures, much of which is brought on by immigration. Is it possible to understand and integrate two unique cultures? This presentation argues that through opportunities afforded by service learning courses, cultural integration can happen, did happen, and will continue to happen. Knowledge becomes enfleshed, incarnate, by applying what is learned in the classrooms. Through interaction with Latin Americans at St. Michael's House I developed a greater understanding of the essence and significance of the Latin American culture. Within me, persons of Hispanic and Anglo cultures were able to become "one."

Coy, Sylvia, EMPRESS ALEXANDRA RUSSIAN RED CROSS WORK DURING WWI, Dr. Lee Williames, History

Nicholas II and his consort, Alexandra Feodorovna were the last autocratic rulers in Russia from 1894 to 1917. Under the leadership of Nicholas II, the Russians entered the "Great War" against Germany in 1914. During the "Great War," the Empress was accused of being pro-German and was criticized for her interference in Russian political matters under the influence of Rasputin. The Empress' critics did not pay quite as much attention to her charitable efforts during this period. This paper will focus on Empress Alexandra's participation in Russian Red Cross work during World War I. It will highlight her instrumental influence in setting up temporary infirmaries for the care of wounded soldiers that were moved from the battlefields via her sanitary trains. It will show that she exhausted her energies from 1914-1916, not only as a patron, but also through hands on service as a surgical nurse. After 1916, she took pride in her role of inspecting the temporary hospitals, reviewing reports, and visiting with the wounded soldiers. How were her good works perceived by her peers and other contemporaries? How did she, herself, view her efforts? Were her motives sincere or was she just playing politics? In reviewing the memoirs of her peers, contemporary articles, and her own letters, we will glimpse into the life of the Empress during the "Great War."

Crump, Carolyn, Lamas, Maria; Castillo, Susan; Ona, Razel., THE PSYCHOMETRIC PROPERTIES OF THE DIVERSITY PRACTICES SCALE, Dr. Ly Phan, Psychology

In today's diverse workplace, the need for an in-depth understanding of intercultural interactions has increased. The purpose of the following study is to assess the psychometric properties of the Diversity Practices Scale. The survey used in this study is a subset of the original; the 12-item scale measures three categories of diversity practices: training, accountability, and organizational work design for diversity. The scale surveys the extent to which an organization employs certain practices in its effort to work with an increasingly diverse workforce. Approximately 960 full-time employees will be invited to voluntarily participate in this study. The employees were recruited from the Houston Metropolitan Area and included both males and females of various ethnic backgrounds between the ages of 18 and 65. Preliminary analysis of responses from 102 employees showed .934 as the internal consistency of the adapted Diversity Practices Scale . An exploratory factor analysis of the survey yielded two factors (eigen value > 1). Discussion of the scale and suggestion for future research are included.

Cueva, Mark, HISPANIC VALUES AND THE SPIRIT OF CAPITALISM, Dr. John Burke, Political Science.

The Hispanic population is the fastest growing ethnic group in the United States. In conjunction with this rise in population, the percentage of Hispanics who have completed a high school education is lower than Asian and Pacific Islander, Non-Hispanic white, and Non-Hispanic black students. This paper will look at the educational, economical, and political challenges facing this growing ethnic group to understand how the population growth will affect our nation. By analyzing the historical role of cultural values and their effect on our national identity, we can accurately define and better understand the challenges that face our country.

Dao, Huong, A FINANCIAL STATEMENT ANALYSIS OF ORACLE AND MICROSOFT CORPORATIONS, Dr. Barry Willbratte, Finance

This project briefly surveys the history of the software industry, from the late 1950s to present day. As part of this survey, the project traces the remarkable history of this key component of the technology industry and to some extent explains why two particular firms came to dominate and others fell by the wayside. The heart of the project is an in-depth financial analysis of the two market leaders in the software industry: Oracle and Microsoft. The financial conditions of the two companies are compared using a number of widely used financial ratios. Information was obtained from the balance sheet, income statement, and statement of cash flows and used to calculate key ratios which reveal certain weaknesses and strengths of the firms.

Dao, My; Avila, John; Ayeras, Ara; Marruffo, Liann; Nguyen, Nam; Trevino, Jeanette, BREEDING DANIO RERIO FOR THE INVESTIGATION OF BHLHB4 GENE EXPRESSION IN EMBRYONIC DEVELOPMENT, Dr. Debra Bramblett, Biology

Developmental research suggests that the basic helix-loop-helix transcription factor Bhlhb4 is essential in retinal development and maturation in mice. The mouse is an important model organism in studying the developmental biology of vertebrates. The Danio rerio, also known as zebrafish, is an important vertebrate model organism as well, due to its powerful genetics, quick overall development and maturation, and in particular external fertilization and development. Both models are vertebrates, thus we believe that the Bhlhb4 gene is likely to play a role in the development of both the mice and the zebrafish. The fact that the zebrafish embryos are translucent facilitates examination of gene expression by whole mount in situ hybridization and through this method we should be able to confirm the expression pattern of the gene in this model. However, several procedures must be done before the detection of the expression of Bhlhb4 in zebrafish embryos by this method. Zebrafish embryos must be collected at various stages in order to determine when and where the gene is expressed. The zebrafish are hardy fish and reproduce easily which contributes to their use in developmental research. We are in the process of establishing optimal living and breeding conditions in order to have superior egg yield. To this end, we designed and constructed specialized egg collection chambers to prevent the parents from consuming their young. We have already collected zebrafish embryos at several stages and preserved them for future experimentation.

Davis, Katherine, "STROKE OF GENIUS" A ONE-ACT PLAY, Prof. Sam Havens, Drama

"Stroke of Genius" will be a dramatic reading of an original one-act play. The presentation will utilize university drama students reading the various roles. This performance will demonstrate plot and character development, imagery and true-to life situations and dialogue. This presentation may contain offensive language and material.

Delpassand, Nahal, YOUTH POLITICAL PARTICIPATION: AN ANALYSIS OF ROBERT PUTNAM AND HIS POLITICAL CONTEMPORARIES, Dr. John Burke, Political Science

Throughout the last four decades there seems to be a growing trend towards a lack of youth political participation. This perceived decline in participation, by those defined as 18-34, is pervasive, not just affecting presidential politics, but also state and local elections. Thus, an assessment of youth participation will be helpful in revealing the origins of this pertinent issue. Specifically, Robert Putnam cites, in his politically notorious book "Bowling Alone", that the decline in youth participation is directly correlated to existing generational differences. Therefore, he argues that, "the key question to ask about generational difference is not how old are people now, but when were they young." Thus, this paper will systematically apply his conclusion to those of his political contemporaries for hopes of clarity on this widely discussed topic.

Deskin, William T., ASSESSING THE IMPACT OF UNDOCUMENTED IMMIGRATION ON METROPOLITAN HOUSTON'S PUBLIC HEALTH INFRASTRUCTURE, Dr. Jon Taylor, Political Studies

This paper will assess the fiscal impact of the federal and state requirements to provide indigent health services to undocumented immigrant workers and their families on Houston area cities and counties. In 2003, the State of Texas ordered that city and county governments assume nearly all of the financial responsibility to provide indigent health care services. Many of those who utilize local indigent health care are undocumented workers and their families, who use public hospitals as their primary care services, taking advantage of both federal and state laws that require that public hospitals must provide indigent health care, irrespective of the cost or ability to pay. In response to the state's order on indigent health care, a number of cities and counties filed suit against Governor Perry, arguing that the state was placing an undue fiscal burden on them through an unfunded mandate, which is prohibited by the State Constitution. Many cities and counties have threatened to close their hospitals completely, reduce operations, or withhold services. It is hypothesized that as the estimated undocumented population rises,

there is a corresponding rise in city and county taxes to cover the expenses of these undocumented workers and their families. It is further hypothesized that as taxes rise, it quickly reaches a tolerance limit, resulting in a "tipping point" that results in taxpayer revolt and in the reduction or denial of services. The paper concludes with proposals to alleviate the crisis in the Houston metropolitan area and throughout Texas.

Diaz-Albertini, Kristine, GOING NEGATIVE: ASSESSING THE IMPACT OF NEGATIVE CAMPAIGN ADS ON VOTER TURNOUT IN THE 2006 TEXAS SENATE DISTRICT 7 REPUBLICAN PRIMARY, Dr. Jon Taylor, Political Science

This paper assesses the impact of the widespread use of negative advertising on voter turnout on a Texas State Senate primary election. Scholarly work within Political Science suggests that while negative advertising is viewed as both superficial and contributing to a sense of cynicism within the electorate, it nonetheless provides a useful venue to communicate information about candidate's image and campaign issues. Specifically, this paper hypothesizes that as policy-based attacks decline in favor of personality-based attacks in an election, there is a statistically significant negative impact on expected voter turnout. The paper will test this hypothesis by analyzing the impact of negative adverting in the contentious four-candidate 2006 Texas Senate District 7 Republican Primary. Evidence will be offered as to the effectiveness of the use of differing forms of media to convey negative advertising messages.

**Dillon, Kate, FROM TRADE LIBERALIZATION TO POVERTY REDUCTION: EXPLORING CHANNELS OF CAUSATION, Dr. Hans Stockton, International Studies

Once the economic model of choice in the developed world, trade liberalization has become the policy of choice for developing countries and is the primary conditionality for both debt relief and loans from multilateral institutions. Moreover, since the early nineteen nineties, trade liberalization has been proposed to reduce poverty based on a belief in its capacity to generate sustainable economic growth. This paper seeks to assess the effect of trade liberalization on poverty reduction using the cases of 27 countries enrolled in the IMF/WB Heavily Indebted Poor Countries program (HIPC). This study will first test whether trade liberalization leads to economic growth. This test employs three discrete measures of economic openness- the Sachs and Warner Openness Index, the Collected Tariff Ratio, and the Penn World Tables OPENK- for each country from 1970-2000 and compares levels of openness with rates of change in economic growth. Secondly, using a measurement of poverty that includes both "social" and "economic" variables, the paper then compares each country's growth/openness index with poverty levels. The goal is to identify correlations between open economies and poverty reduction. The key finding is a call to reconsider trade derived poverty reduction strategies. Trade liberalization in and of itself appears to have little or no impact on poverty reduction.

Dominguez, Anabelle, REFUGEE RESETTLEMENT: THE MYSTERY OF THE HOLY FAMILY, Sr. Paula Jean Miller, Catholic Studies

Refugees Resettlement: the Mystery of the Holy Family: This presentation explores the plight of refugee families and the barriers they face to life with dignity. The refugee family can be linked to the rich Christian tradition of the Holy Family of Nazareth, who experienced the plight of the refugee. Another source of spiritual hope for these families is their mission to be an Icon of the Triune God, an image of love and community within diverse and difficult circumstances. This presentation integrates one student's educational concentrations in Catholic Studies and Theology with internship experience at Catholic Charities of Galveston-Houston in Refugee Resettlement.

Dusek, Brittany, THE EFFECTS OF LANGUAGE BARRIERS ON JOB SATISFACTION AND WORK-RELATED STRESS, Dr. Ly Phan, Psychology

The metropolitan areas of the United States have been transformed into i° melting pots i^{\pm} of cultures, due to amalgamation of people emigrating from different countries. One struggle that results from increases in cultural diversity in the workplace is the presence of language barriers, as many people may not speak

English as their primary language. Our study was designed to measure different factors of cultural diversity in the workplace for employees working the Houston area. I predicted participants who speak English as their first language to report higher levels of overall job satisfaction, greater opportunities for promotion, and lower levels of threat-related job stress compared to participants who speak English as their second language. Approximately 960 full-time employees will be invited to voluntarily participate in this study. Preliminary analyses of responses from 102 participants showed supports for the hypotheses. There was a significant difference between the two language groups regarding satisfaction with their job in general t(75) = 31.783, p < .0001, satisfaction with opportunities for promotion t(69) = 14.886, p < .0001, and ratings of threat-related stress at work t(71) = 10.480, p < .0001. Discussions of preliminary results as well as suggestions for future research were included.

Dyer, Tiffany, THE SACRAMENTAL NATURE OF MUSIC, Sr. Paula Jean Miller, Catholic Studies

Throughout history, music has had moral and communal value to those who studied it and those who listened to it. Today, however, music is often considered an expensive hobby or something that merely "sounds nice." Since World War II, music therapists have used music to connect with nonverbal or limited-verbal patients. Why does music have such a great effect on us? This paper will attempt to discover an answer to this question as well as its implications in music education.

Eaves, Kayleigh; Knutson, Amy, USING ENZYME INHIBITION TO IDENTIFY CYSTEINE PROTEASES IN THE WHITEFLY Dr. Rosemarie Rosell, Biology

Bemisia tabaci (B biotype) whiteflies are important plant-virus transporters; thus, they can be very detrimental to the agricultural industry. We are interested in understanding how plant viruses escape degradation in the whitefly digestive system. In general, proteases, enzymes that break down proteins, are important components of intracellular and extracellular digestive processes. Our project has focused on using enzyme inhibitors to identify specific types of proteases in whiteflies. Previous studies have shown that the protein degradation present in whiteflies is related to cysteine protease activity, which occurs at a low pH and is associated with lysosomal activity. We used the inhibitors, leupeptin and pepstatin, to specifically identify the presence of cysteine proteases in whiteflies. We have used these inhibitors in polyacrylamide gel electrophoresis (PAGE) assays to track proteolytic activity in whole body whitefly extracts. Future research will focus on demonstrating that this activity is not only part of normal homeostatic mechanisms, but also play a role in digestion in whiteflies. Additionally, we plan to test viruliferous whiteflies in our assay to determine the effects of these proteases on the viral transmission process.

Ehrler, Christa, O, Dr. Kerry MacArthur, English

This paper chronicles the life of one individual whose life decisions mirror his internal anguish.

Escobedo, Izela, GLOBAL AGRICULTURAL TRADE LIBERALIZATION AND DOMESTIC POLITICS: INCOMPATIBLE AGENDAS LEAN TOWARDS A STALEMATE, Dr. Gustavo Wensjoe, International Studies

In theory, there is an overall understanding as to the benefits of agricultural trade liberalization for both developed countries (DCs) and less developed countries (LDCs). However, in practice, LDCs argue that these benefits are not being realized for them. The central question is: Why do DCs continue to participate in trade-distorting practices? This paper will argue that domestic politics plays a vital role in agricultural trade decisions, which in turn hinder the progress of trade liberalization. This topic is pivotal to all players in global trade given that the LDCs' performance has serious implications for the global economy. LDCs have an interest, since most of their income is derived from agricultural exports. On the other hand, DCs must respond to their domestic constituencies who have utilized their power to hinder the procedure toward making agricultural trade less restricted. This paper will look at the history of agricultural trade liberalization, specifically at the Uruguay Round of 1986 and the Agreement on Agriculture of 1994. It will examine the role of domestic politics and the main form of governance in the trade realm, the World Trade Organization. Following will be the agricultural trade postures of the LDCs,

the US and the EU. The paper will then provide two case studies including the US Sugar Policy and the EU Banana Case. This study will show that global agricultural trade liberalization and domestic politics lean towards contradictory agendas and the importance of reconciling the two in order to maintain a stable global trade regime.

Farizani, Amir, DEVELOPMENT OF EXPERIMENTS FOR THE ADVANCED ORGANIC LABORATORY, Dr. William Tinnerman, Chemistry

Prophyrins and related macrocycles are vital biomolecules present in systems that convert light into chemical energy, transport oxygen, and regulate electron transport at the cellular level. The prophyrin structure is found in heme with iron incorporated at the center and in chlorophyll with magnesium incorporated in the molecule. Porphyrinogens, also known as calix [4] pyrroles, resulting from the condensation of pyrrole with aldehydes are quite unstable due to their ease of oxidation. Prophyrinogens resulting from the condensation of pyrrole and ketones are very stable compounds. The objective of this project is to develop laboratory experiments for the advanced organic laboratory. The experiments should complement lecture material and provide instructions in techniques used in modern organic chemistry research. In the early stages of this project we developed a synthesis of caprolactam from cyclohexanone in two stages. First cyclohexanone is converted in to an oxime via reaction with hydroxyl amine. The oxime is than rearranged in to caprolactam through a Beckman rearrangement to give us a good yield of the crude product. We also developed a synthesis of meso-octamethylporphyrinogen by using pyrrole and acetone as the reactants and used analytical techniques to examine our product. Other ketones such as acetophenone and benzophenone were used as reactants in order to examine the effects of the functional groups on the prophyrinogen.

Fesseha, Betiel STUDY OF MACBETH: THE TAINT OF EVIL AS A MARKER OF ALL MAN, Dr. Clinton Brand, English

In this paper I propose that although Shakespeare's Macbeth is shrouded with darkness and the sense of impending doom, it is ultimately about salvation rather than damnation. What's more, Macbeth, the title character, is remarkably villainous, but is developed to move us to sympathy and acceptance of who we are as human beings—acceptance that we too are tainted by evil. For just like us, he has grappled with his conscience, but he freely chooses to satisfy his will and commit deeds that will damn him forever. In addition, the play's markedly morbid themes such as dead bodies, bloody daggers, ghosts, and witches are the elements used to astoundingly serve as portals to self-discovery and message of redemption and salvation, rather than trademark damnation. Indeed, Macbeth's psychological and metaphysical struggle with not only trying to do the right thing, but also trying to live with sin after it is chosen further magnifies the magnitude of his immoral capabilities. In essence, by going along Macbeth's journey, the reality of man's nature is exposed, and Macbeth becomes the quintessential morality play in showing us the road to redemption, by showing us what Macbeth failed to grasp—grace as the means to cleanse our tainted state of existence, and fill the abyss of meaninglessness our choices can create.

Firat, Ibrahim, THE CRIMEAN WAR (1853-56): REALITY OF MILITARY TECHNOLOGY VS. ANCIENT ARTILLERY, Dr. Lee Williames, History

The Crimean War of 1853-56 was the first major European war since 1815, pitting Russia against an alliance of Great Britain, France, Sardinia (Italy), and the Ottoman Empire (Turkey). The British and the French asserted that their involvement in the war between Russia and Turkey was for the sake of protecting the "balance of power" in Europe as Russia had become a serious threat to Europe since Tsar Nicholas I's firm stance against the revolutions of 1848. However, the Crimean War revealed the world that Russia's military strength consisted of "man power" and nothing else. When the West was going through process of industrialization, Russia was still living in the Middle Ages with serfdom still in place. Russia attacked Turkish-held Balkan territories in an attempt to further damage the already-declining Ottoman Empire with the hope of eventually conquering its whole territory. As British generals—Sir Edward Bruce Hamley and Sir Henry Evelyn Wood put it, "the battles [of the Crimean War]...represented the establishment of a new war-era, with new weapons technology [of British and French] meeting up with antique military strategy [of Russian and Turkish]." Therefore, despite the overwhelming numbers of

Russian man power, the allied forces gained a relatively easy victory against Russia due to their tactical and technological advantage over the Russians. Using the primary source documents from generals and soldiers who fought in the Crimean War, my presentation will attest to the significance of the first-modern war of Europe and show how this war taught the big lesson to all sides involved: non-industrialized states in the 19th century were destined to failure against industrialized powers.

Flanagan, Sandra, ISLAM AND WESTERN EUROPE: MIASMA OF TENSION AND PROMISE, Dr. Mehdi Noorbaksh, International Studies

The current tension in Europe between the private secular culture and the public conservative Islamic faith is a multi-faceted issue involving the freedoms' of religion, from persecution, and the freedom of expression. Loosely speaking, Islam has become the new Judaism for Europe, with more persecution and prejudice being focused toward Islamic practitioners than toward the historical prejudice against Jews in Europe. I began initially by asking the question: after looking at the current political and societal situation of Islam and Western Europe and considering the historical foundations, what can be anticipated for their future relations? From this analysis, I intend to argue and prove that the tensions between them can best be relieved through more political and social initiative. My policy suggestions would provide stricter and more expedient punishment for those who commit hate crimes and would consist of more government involvement in managing the public areas for work, educations and government.: This political prescription meets the beast of prejudice head-on. While no law or other legal decree can actually do away with prejudice, it is important to realize that the government can create such laws as to create effectively an environment more conducive for cultural understanding and tolerance. It is impossible to implement a change in societal views and conceptions overnight, however, with time and the correct procedures, one can relegate such things as prejudice to the background of existence.

Fojas, Christina M, IMMEDIACY CUES AND PERSUASION: APPLYING THE NONVERBAL IMMEDIACY SCALE TO PRESIDENTIAL DEBATE, Dr. Robin Williamson, Communications

This study examined the importance of nonverbal cues in a political forum, specifically the first 90-minute section of the 2004 Presidential debates between George W. Bush and John Kerry. The significance of nonverbal cues in audience perception and the role of immediacy in persuasion is addressed, in an attempt to reinforce or disprove the Direct-Effects Model of Communication within the forum of a televised political debate. The Nonverbal Immediacy Scale was applied to each candidate in an attempt to discern each individual's effectiveness in self-presentation through nonverbal immediacy cues. According to test results, neither candidate demonstrated high immediacy; surprisingly, each candidate received exactly the same NIS score and subsequently the Direct-Effects Model is not necessarily an appropriate model to predict the outcome of a televised presidential debate. Test results lead one to assume there are other factors besides immediacy that must influence a voter's perception of political candidates.

Garcia, Dahnya, PARTY? WHAT PARTY? ASSESSING THE ROLE OF PARTISANSHIP IN HOUSTON'S, Dr. Jon Taylor, Political Science

State law requires that the City of Houston officially operate as a non-partisan municipal government. The mayor and the fourteen city council members are barred from associating themselves by party. However, an examination of the recent history of both the mayor and council members suggests that a strong, if not inextricable tie to either major party, is an implied, if not expected, condition for election to office. This paper hypothesizes that partisanship was an inadvertent result of the changes in 1947 to the City Charter that moved Houston from a "Council-Manager" arrangement to the current "Strong Mayor-Council" arrangement of municipal governance. It is additionally hypothesized that the subsequent changes to municipal government in Houston have resulted in the creation of a partisan mayor and city council in an officially non-partisan system, in violation of the spirit of Texas state law on municipal government. The paper will assess the role that unofficial partisanship plays in the electoral process for mayor and the city council in Houston, as well as the implicit partisan dynamics that have a tendency to play out between the mayor and city council members. Conclusions will be offered as to the potential for reforming and strengthening the non-partisan character of Houston's municipal government.

Garcia, Kimberley, SCIENCE AND FAITH: FINDING A MIDDLE GROUND, Sr. Paula Jean Miller, Catholic Studies

Science and Faith are often thought to be at opposite ends of the spectrum, yet certain advances in science have contributed to both society and religion. In the past decade, there have been moral concerns about embryonic stem cell research, cloning and other forms of genetic experimentation. The question remains: can we better understand ourselves as human persons if we are using scientific methods that diminish or destroy human dignity? What constitutes truly human advancement? What criteria do we use to determine "progress"

Garrett, Matthew, SALVATION AS FOUND IN THE FIRST FIVE CENTURIES OF THE CATHOLIC CHURCH., Sr. Madeline Grace, Theology

Many theologians have addressed the critical question: is there salvation outside the Catholic Church? Catholic apologists have concentrated on this question of salvation through out Christian history. Our intrest in the study encompasses the writings of such Church fathers as Saints Justin Martyr, John Chrysostom, Ignatius of Antioch in addition to Clement of Alexandra and Origen. The issue of salvation outside the Church leads to more specific questions, one of which is, is there salvation for people who lived before Christ. The general consensus is that people who lived before Christ could, in fact, be saved so ling as they complied with the absolute truths.:: The elements of validity of sacraments and martyrdom will also be probed for those who lived beyond the Church. Some Chruch fathers will address the issue that Christianity by the end of the fourth century has spread to much of the known world. The responsibility of accepting known faith becomes apparent for these early writers.:: The issue of salvation outside the Church is certainly revisited in later eras. However, this study finds its concentration in the writers of the first four centeries as a springboard for later study.

Gautreau, Joshua, OH WHERE, OH WHERE DOES MY TITHING GO? Sr. Paula Jean Miller, Catholic Studies

Have you ever wondered how your church donations are spent? Have you withheld donations because you heard rumors about how money was used? This presentation reveals the role of the parishioner in church finances, explains church fundraising, and details current revenues and expenses of the Archdiocese of Galveston-Houston. Discover the ways in which your monetary donations make an impact on the needy within the Houston area.

Gibbs, Ashley, BEZIER CURVES IN APPLICATION, Dr. Richard Myer, Mathematics

The mathematical problem of interpolation is concerned with finding a curve that best fits or represents a given set of discrete data points. The algebraic representations of these curves are not unique but certain representations can be more convenient for a given situation. One particular representation is a parametric curve in Bezier form.Bezier Curves see frequent use in computer-aided design, fonts, and in computer animation. In this project we plan to explore the mathematics involved in Bezier Curves and how they are used in our daily lives.

Gleason, Rebecca, INTERNATIONAL LAW AND THE PROSPECTS FOR THE INTERNATIONAL CRIMINAL COURT, Dr. Hans Stockton, International Studies

National and global politics are being transformed as countries around the world move towards a new international stage. In order to regulate this new international environment, a strong international legal presence is needed. In particular the International Criminal Court (ICC) in the Netherlands is one of the leading international legal institutions. Unfortunately, both international law and the ICC are struggling to ascend because of the strength of state sovereignty. This study poses the following research question, is state sovereignty causing insurmountable disruptions in the efforts to establish a system of international criminal law? In order to answer this broad question, this paper will examine the development and evolution of the ICC. This paper will identify the general flaws of international law and the institutional flaws of the ICC in order to offer solutions that may improve the capacity of international law and the ICC.

This paper will find that only when countries can move past their intense need for sovereignty and self rule, can international law and subsequently the ICC, create a universal judicial system.

Gomez, Gustavo, RECYCLING VIEWS: A FANTASY THEME ANALYSIS OF DODGE AND TOYOTA TRUCK COMMERCIALS, Dr. Robin Williamson, Communications

Dodge and Toyota present their Hispanic-centered pick-up trucks commercials using the recycled fantasy themes of the rugged cowboy and the good family provider, respectively. These television advertisements present both vehicles as the necessary means for the fantasy themes to be possible or credible, making them the reality links for the fantasy themes. A literature review of the Symbolic Convergence Theory will support the thesis by shedding light into the theory's history, structure, assumptions and definitions. An application of a fantasy theme analysis, which is part of the Symbolic Convergence Theory, will isolate the fantasy themes of the rugged cowboy and the good family provider. A discussion of the Hispanic cultural elements within the commercials will deepen the understanding of both the fantasy themes and the attempt of Dodge and Toyota to connect with the Hispanic market. Together, a fantasy theme analysis and a discussion of the Hispanic values embedded in the messages will place the fantasy themes within the cultural context in which they attempt to thrive.

Gomez, Gustavo, BUSTING FANTASIES: THE TRUTH CAMPAIGN AND ITS REALITY CHECK PUBLIC SERVICE ANNOUNCEMENTS Dr. Debra Andrist, Spanish

The anti-tobacco, multi-channeled public service announcement campaign, Truth, functions by creating a reality check fantasy theme, which works at weakening the reality links of the fantasy themes that tobacco companies use to sell their products. This reality check fantasy theme is supported by the use of words that bring to mind certain schema, as the cognitive-transactional model of media effects describes. When the supporting reality links of a fantasy theme are weakened or effectually destroyed, the fantasy theme becomes obsolete, making it relatively easy to "see through" the sales pitch of the creator of the fantasy theme. Once the fantasy theme implodes, knowledge retention is attempted by the use of specific words as the cognitive-transactional model points out. An overview of Symbolic Convergence Theory will serve to deepen the understanding of its history, elements, and definitions. A fantasy theme analysis, as part of the Symbolic Convergence Theory, will lay bare the strategy of the Truth campaign, which works by imploding the fantasy themes of tobacco companies.

Goodwin (Hall), Lori, COMPOSED IN AN AGE OF DOUBT: TENNYSON'S IN MEMORIAM, Dr. Clinton Brand, English

The primary creative impulse in the creation of *In Memoriam* was the early and tragic death of Tennyson's closest friend, Arthur Hallam. Hallam's death came as a paradigm-questioning shock for Tennyson, especially taken in the midst of the upheaval that typified Tennyson's England. A poet of the Victorian Age, Tennyson lived in a society plagued by chaos and confusion. This confusion was the result of many factors, including a crisis of faith and the corresponding skepticism resulting from the publication of Lyell's geology and Darwin's theory on the origin of the species. These challenges complicated the split between religious faith and scientific reasoning, making Hallam's premature death even more difficult for Tennyson to accept. While much of Tennyson's anxiety was shaped by the Victorian crisis of belief, the poem also speaks to the ageless human concern with life, death, and immortality. In lamenting the passing of his friend and confronting the spectre of Hallam's non-existence, Tennyson laments the passing of one era of human thought and heralds the dawning of another. *In Memoriam*, then, mourns the death of the deistic mode of thought, which had largely characterized human thought from the eighteenth century through the Victorian age. Tennyson's call for a return to simple faith mirrors the modern day reaction of many believers in the face of spiritual doubt.

Gutheinz, Stephanie, THE ROLE OF THE CHRISTIAN CONSERVATIVE MOVEMENT IN THE REPUBLICAN PARTY'S RISE TO POLITICAL DOMINANCE, Dr. Jon Taylor, Political Science

The Republican Party has enjoyed an unprecedented level of political dominance over the past several

years. The Christian Conservative movement has played a key role not only in getting Republicans elected, but in keeping them in office as well. The movement became prominent during the 1980s under the guidance of Rev. Jerry Falwell. The Moral Majority, as it was known then, benefited from a great amount of support and media attention during the Reagan Administration, but soon after fell apart due to its failure to mobilize and the grassroots level. In the late 1980s, the movement underwent a drastic reformation thanks to the efforts of Pat Robertson, whose unsuccessful bid at the White House in 1988 signaled the need for a stronger, more unified movement. Pat Robertson's Christian Coalition initiated a change in American politics that eventually led to the remarkable success of the Republican Party. The New Christian Right has been extremely influential not only in domestic issues, but in foreign policy as well. Throughout the last decade, many political scientists have argued that it is impossible for the Christian Conservative movement to continue its current level of dominance in American politics, but other evidence suggests that its power will not be fading any time soon

Holliday, Michael W., GC/MS INVESTIGATIONS OF CARBONYL CONTAINING MODEL COMPOUNDS: STEROIDS AND METABOLITES, Dr. Thomas Malloy, Chemistry

We have used commercially available O-(2,3,4,5,6-pentafluorobenzyl)hydroxyl amine hydrochloride (PFBHA) and O -2,2,2-trifluoroethyl hydroxyl amine hydrochloride, synthesized in our laboratory, to modify various model compounds, including carbonyl-containing steroids and metabolites. This has allowed us lower detection limits for GC/MS studies of these compounds, particularly by negative ion GC/MS (electron capture). PFBHA has some distinct advantages, but for more complex, less volatile carbonyl compounds or those which contain multiple carbonyls, the fluoroalkyl hydroxylamine incorporates fluorine and with only a minor impact and sometimes an actual increase in volatility of the derivative.

Holliday, Michael; Nguyen, Hai; John, Jocelyn; Lawal, Lateef; Jordon, Amber, STUDENT AFFILIATES OF THE AMERICAN CHEMICAL SOCIETY AT THE UNIVERSITY OF ST. THOMAS, Dr. Thomas Malloy, Chemistry

SAACS at University of St. Thomas has attained Honorable Mention or Commendable status for the last six years. This has been accomplished through publicizing and holding regular meetings, by planning activities of interest to the student members, by interacting with the Local ACS section and with the community. We were particularly active in the wake of hurricane Katrina with evacuees from Louisiana. One of the goals this year was to increase interaction with SAACS Chapters on nearby campuses and we have been successful in this. Attending scientific conferences is important and we were well represented at the San Diego National ACS Meeting. Houston is a center of activity in the chemical industry and we invite speakers from local industry and universities to present seminars on campus. We also take field trips to local facilities. Social interactions are important and we have end of semester banquets with other science and health professions related organizations.

**Iglesias, Jorge, THE PROSE OF DISCONTENT - AMERICAN SOCIETY AND THE LITERATURE OF THE 1920S, Dr. Joseph McFadden, History

The purpose of my essay is to analyze the works of the most prominent American authors published during the 1920s and to assess the way in which they reflect American character and the lifestyle that was common during that decade. I seek to prove that these authors who so severely criticized American society were highly successful for two main reasons: (1) because of their outstanding intellectual qualities and their original contributions to American literature, and (2) because they sought not to destroy the American way of life, but to keep it from destroying itself. Instead of focusing on single works, I focus on the authors themselves, i.e., on their philosophy and their conception of US society and way of life. The authors studied are: Sherwood Anderson, Sinclair Lewis, F. Scott Fitzgerald, Ernest Hemingway, John Dos Passos, Theodore Dreiser, H. L. Mencken, and Eugene O'Neill. The primary sources that I use as support for my assertions are the novels, plays or essays that these authors published around the 1920s, as well as their letters and interviews—when available—and books reviews that reflect how their works were received by literary criticism and the general public. I also draw historical information about the

1920s from Frederick Lewis Allen's Only Yesterday, a chapter of which ("The Revolt of the Highbrows") is specifically devoted to the description of the literary conditions during the decade in question.

Jabbour, Natalie, Jordon, Amber, A PRELIMINARY STUDY DOCUMENTING THE PHYTOTOXIC EFFECTS OF CRUDE PLANT AND LICHEN EXTRACTS, Dr. Joanne Romagni/Dr. Thomas Malloy, Biology/Chemistry

Plant and lichen secondary metabolites are known to have several roles in the ecosystem. Some prevent herbivory; others are protection against competition. We tested the effect of crude extracts, soluble and insoluble, from three species of lichens: Lobaria, Parmelia, Xanthoria, and one higher plant species, Lagustrum on monocots and dicots. We found that of these extracts, Xanthoria showed the greatest inhibitory effect. About 100% of the dicot seedlings did not germinate. From this study, we will isolate the active compounds and determine the mode of phyotoxic activity.

Jaser, Firas, THE DICHOTOMOUS IMPACT OF GLOBALIZATION ON ARAB CHRISTIAN IDENTITY, Dr. Linda Pett Conklin, International Studies

"Arab" often represents a synonym for "Islam," both in the West and the Middle East, and as a result, the Arab-Christian has intrinsically struggled through history to better understand his distinctive identity. Arab-Christians have suffered from a lack of self-awareness due to an identity crisis that has been perpetuated by their isolation in society and by massive emigration. When assessing the identity of Arab-Christians, it is equally important to consider the ever-evolving affects of globalization, as this process will play a primary function in shaping their future. Indeed, globalization is having a profound affect on the psyche of Middle Eastern society as a whole; however, the associated inevitable changes will not impact any other group in the Middle East as substantially as the Arab-Christians. Globalization will reveal both positive and adverse affects on the Arab-Christian community. The process may alleviate their identity crisis, allowing Arab-Christians to increase overall economic status and achieve greater mobility. In addition, the diffusion of the Arab-Christian population internationally may exemplify a possible model for an ethnic minority that functions on a global level. On the other hand, globalization supports homogenization, increased emigration, and "Western" ideals, all of which will further the Arab-Christian's identity crisis. This paper will argue that the future role of Arab-Christians will dramatically change due to globalization and its dichotomously beneficial and adverse affects on their self-prescribed identity crisis.

Jefferson, Matthew, MESSAGE DESIGN LOGIC AND THE SWIFT BOAT VETERANS FOR TRUTH, Dr. Robin Williamson, Communications

During the 2004 Presidential Election in the United States a group known as the Swift Boat Veterans for Truth published a series of advertisements criticizing John Kerry in his bid to become President of the United States. Their advertisements were intended to convince people of Kerry's inadequacy as a leader and portray him as a traitor to his country and to his fellow soldiers. To better understand the advertising methods used by the Swift Boat Veterans for Truth the theory of message design logic was examined by looking at its' three forms: expressive, conventional and rhetorical. Briefly: expressive design logic focuses on expressing individual feelings and opinions; conventional logic suggests that conversation results from following a particular set of socially conventional rules in a particular way to accomplish goals; rhetorical design logic views messages and meanings as negotiated between sender and receiver. Finally, message design logic was applied to the video advertising of the Swift Boat Veterans to gain a better understanding of their message and their persuasive appeals. Their ads incorporate message design logics to varying degrees depending on the ad, but overall, the Swift Boat Veterans' campaign effectively utilized all three types of message design logic. In doing so, they were able to convey a persuasive message and draw high levels of attention to their message. Even though they weren't solely responsible for John Kerry's defeat, the Swift Boat Veterans for Truth played a role in his loss due to effective application of message design logics.

Jefferson, Matthew THE 2004 DEMOCRATIC PRIMARIES: HOW THE MEDIA UNINTENTIONALLY SELECTED JOHN KERRY AS THE NOMINEE, Dr. Jean-Philippe Faletta, Political Science

During the primary season leading up to the 2004 presidential election, many candidates fought for the right within the Democratic Party to run against George Bush in the November election. These candidates included John Kerry, John Edwards, Wesley Clark, Howard Dean and more. The media covered these primaries extensively and sought to provide the best news stories possible. Unfortunately, this skewed the poll data based on the tone of the articles printed and led the public on a roller coaster ride of public opinion with John Kerry ending up on top. To better understand how and why this occurred; current research was examined in the field of the media's relationship to politics. Next, poll data from various sources conducted during the primary season were examined in conjunction with identifying trends in news coverage leading up to each poll. This includes such notable time periods as the lowa Caucus, the infamous Dean Scream, and the coverage immediately following various candidates' exit from pursuit of the nomination. Finally, based on the information gathered, conclusions were drawn as to the level of influence the media had on the public during the election.

Jimenez, Shaula Tatiana, REMITTANCES AS AN UNPARALLELED FINANCIAL FLOW AND ITS CONSEQUENCES IN MEXICAN WELFARE, Dr. Mehdi Noorbaksh, International Studies

The financial crisis of 1982, 1984, and 1994 opened the door to neoliberalism in Mexico which provided with reforms in market liberalization, deregulation, privatization as well as the basic reduction of social spending as the state reduced its central role and tightened fiscal policies. Domestic economic instability made external finance, such as foreign direct investment, crucial to stabilize capital flows and state sustainability and development. At the same time, remittances began to gain momentum to compete with FDI as a major source of external finance. In 2004, FDI accounted for 16.602 billion dollars and remittances accounted for 16.612 billion dollars into the Mexican economy. The argument that remittances enhance the ineptitude of the central government and create complacent and dependent citizens is valid and should be addressed; however, it pales to the argument that there is absolutely no comparable alternative to remittances. The reality of remittances should not be addressed exclusively in a macroeconomic context. Rather, remittances should be first measured in their microeconomic influence. Thus, this paper will argue that remittances offer supplemental income which offset discrepancies in total household revenues, allowing for the rise in purchasing power as well as proper investment in human capital. The analysis will show that remittances have quickly escalated to become the most stable source of external finance in Mexico, and what is more, a crucial form of social insurance in the midst of diluted state-sponsored social welfare.

John, Jocelyn, Wheeler, Crawford, SYNTHESIS OF CHALCONES, Dr. William Tinnerman, Chemistry

The chalcone family, important compounds in pharmacology (chemotherapeutic agents, anti-tumor, and antibiotic activity), are found in natural products and electronics. A series of chalcones were synthesized from acetophenone and benzaldehyde, and substituted derivatives thereof. Chalcones have an extensive conjugated system which is responsible for their activity. For the synthesis, two methods were used, the "green" solvent-free approach and the use of ethanol as a solvent. The solvent method gave a cleaner product with the parent so it was used for the derivatives too. The first derivatives prepared were monoflouro derivatives substituted in the aromatic ring in the aldehyde and the ketone. The á, â- carbonyl absorption in the IR, UV, and the 1H-NMR were correlated with the substituent's Hammett sigma constant.

Jordan, Jared, LIFTING THE VEIL, Sr. Paula Jean Miller, Catholic Studies

Come be a witness to the post-modern revolution that returns sacred art to its place among the "greats" in museums and galleries. Learn what it means to be a true Catholic artist and a creator of religious art in the freedom of post-modern American society. Move away from the pessimism of modern art to be enveloped by the splendor of the illustrated mysteries of God. Religious art has always had a place in the Church for the faithful. As the boundaries of art and theology are explored, a new evangelization can be brought about by the faithful post-modern artist.

Jordon, Amber CHARACTERIZATION OF EXTRACTS FROM LICHEN GENERA, LOBERIA, PARMELIA AND XANTHORIA USING MASS SPECTROMETRY, Dr. Thomas Malloy, Chemistry

We have acetone-extracted secondary metabolites from the thalli of several lichen genera, including *Loberia* sp., *Parmelia* sp and *Xanthoria* sp to obtain data to determine biological activity and chemical characterization. They have been characterized by both chemical and electron ionization gaschromatography-mass spectrometery. Portions of the extracts have been modified with derivatizing agents and the resulting samples characterized by both EI and CI mass spectrometry. Where possible, individual components have been identified. In some cases, only molecular weights have been determined and possible structures have been proposed based on this and fragmentation patterns.

Kahl, Ryan, Struthers, Sarah, THE EFFECT OF ENVIRONMENTAL STRESS ON DETOXIFYING ENZYME ASCORBATE PEROXIDASE IN AIPTASIA PALLIDA, Dr. Joanne Romagni, Biology

When exposed to common environmental stresses, such as abnormal salinity and temperature levels, Aiptasia pallida, a symbiotic sea anemone commonly found in warm, tropical waters, produces enzymes to cope with the changing environmental conditions. Ascorbate peroxide (APX) is one of the many enzymes produced under environmental stress. In this investigation, we analyzed the activity of APX in A. pallida, both in a symbiotic relationship with the zooxanthellae, Symbiodinium sp. and aposymtiotically, under varying salinity and temperature levels. Our goal was to determine whether this symbiotic relationship was mutualistic and to begin to understand why symbioses fail. We found that aposymbiotic anemones had higher levels of APX activity under stress and control conditions when compared to symbiotic controls and symbiotic stressed organisms. This would suggest that the relationship is a true mutualism.

Kahloon, Qura Tul MECHANISM FOR THE PHYTOTOXIC EFFECTS OF VULPINIC ACID, Dr. Joanne Romagni, Biology

Lichens are organisms that consist of a successful symbiotic relationship between fungi and algae. Lichens are capable of colonizing stressful and extreme habitats. Much of their success is due to their ability to produce a variety of secondary metabolites. Some of the ecophysiolgical roles are antiherbivory, anti-competition and protection against abiotic factors such as UV light. Vulpinic acid is lichen secondary metabolite that is linked with antimicrobial and phytotoxic functions. Previous researchers suggest that that the phytotoxic effect of Vulpinic acid impairs cell growth during telophase. In this experiment, we will attempt to elucidate the phytotoxic mode of action of Vulpinic acid.

Konkel, Daniel, Besse, J. M.; Heidegger, Martin; Huddleston, Roger G.; Lawless, George; Sage, Athanase; St. Augustine; Zumkeller, Adolar. AUGUSTINE'S RULE FOR THE MONASTIC LIFE, Sr. Madeline Grace, Theology

On the eve of the 4th century, while the ascetic life was still in its developing stages, St. Augustine of Hippo finished composing his Rule for the Monastic Life. Through this remarkably short document on the regulations of the monastic life, he laid a foundation for not only monasteries, but for religious orders all over the world, even present to this day. Augustine has given to the Church a depiction of the invisible realm of the spirit through the earthly encounters of man, most profoundly, through the experience of fellowship. He stresses this conception of Christian fulfillment through community in the light of the Gospel, "All the believers were one in heart and mind. No one claimed that any of his possessions was his own, but they shared everything they had" (Acts 4:32). Augustine sees in the religious life an anticipation of the "life of heaven and of the angels." Through this concept, the Kingdom of God becomes something lived, rather than hoped for.

Kurian, Sherine, FACTORS THAT INFLUENCE THE PERCEPTIONS TOWARD MINORITY SUPERVISORS, Dr. Ly Phan, Psychology

The current study will examine factors (diversity training and job stress) that influence workers' perspectives on supervisors and diversity: Hypothesis 1: There is a negative correlation between the

extent to which the organization provided cultural diversity training and the perception that minorities in supervisory position are ineffective relative to other supervisors. Hypothesis 3: There is a negative correlation between supervisor rating and job stress. Hypothesis 4: There is a negative correlation between top-level management issuing statements on the importance of diversity and pressure-related and threat-related stress. 136 full-time employees who worked for 20 companies in Houston were given either an online or hard copy survey to take. A list of diversity practices employed by an organization was adapted from the Diversity Practices Survey (Gilbert & Ones, 1999). The Attitudes Toward Diversity scale (ATDS) was adapted from the original scale developed by Montei, Adams, and Eggers (1996). The Abridged Job in General (Russell, Spitzmüller, Lin, Stanton, Smith, & Ironson, 2004) and Stress in General (1985) were used to measure participants' job satisfaction and job stress. One out of the three hypotheses was significant. Preliminary analyses showed support for hypothesis, r(79) = .-.255, p < .05. In addition, hypothesis 2 was also supported, r(79) = .-.294, p < .05. Discussion and suggestion for future research were included.

Kutach, Jeanette GUARDING OUR FUTURE: SUICIDE PREVENTION IN AMERICAN HIGH SCHOOLS, Dr. Terry Brandt, Education

Adolescent suicide is more common than most people think. Having to grow up in a world of instant rewards and consequences, more and more teenagers view suicide as a fast solution to the stress of life. Adolescent suicide has risen at an alarming rate since the 1980's. Yet with this depressing fact comes hope. Schools can be used as a source of suicide prevention; and some schools have already begun to use prevention programs in their system. Schools as a source of prevention and intervention is a logical idea as students spend seven to eight hours a day for one hundred and eighty days out of the year within the school system. With this in mind, this project will look at the problem of youth suicide, the role schools can play in intervening and preventing adolescent suicide, and different suicide prevention programs that have been proposed or are already being implemented in schools.

LaVallee, Chris, THE USE OF MATHEMATICS IN THE DESIGN OF A LONGBOW, Dr. Richard Myers, Mathematics

The invention of the bow and arrow has been with mankind since the earliest of times. Its use has persisted to this day as an enjoyable and rewarding past time despite having been long rendered obsolete by other forms of weaponry. Many people today still enjoy making their own archery equipment, out of natural materials, in addition to shooting it. A survey of the techniques used in the construction and design of their equipment reveals that the methods employed are still very primitive. In this paper we make use of many topics taught to undergraduate mathematics majors to model and ultimately design a longbow that is in some sense optimal. The mathematical ideas used in the course of this paper are: Algebra, Geometry, Calculus, Differential Equations, Runge-Kutta methods for Initial Value Problems, and Newton's Method for solving systems of equations. The resulting mathematical models are then programmed and solved on a computer. Afterwards, the bow design is then built and tested. Many improvements for the model are then discussed..

Lamas, Maria, Castillo, Susan; Chung, Amy; Crump, Carolyn; Cuevas, Mary Jane; Katz, Daniel; Kurian, Sherine; Wolfe, Lesley, PSYCHOLOGICAL PERSPECTIVES ON THE TORTURE QUESTION, Dr. Carl Scott, Psychology

Torture has a long history, despite its uncertain definition and effectiveness. Torture has been in the news due to wars in Iraq and Afghanistan, and associated detention camps. Unfortunately, the discussion of torture often has been vague. Most psychological research on torture has examined victims of torture. We reviewed psychological research and expert opinion about torture, pain, disorientation techniques, and various deprivations (e.g., sleep, food, stimulation). Where possible, we used meta-analytic techniques to summarize empirical research. We examined various guidelines on the treatment of prisoners and evaluated various definitions of torture. Overall, psychologists have argued that torture is ineffective because obtained information is often false. Building a trusting relationship with prisoners produces better results. Torturers use pain to establish authority over the victim and to gather information. However,

severe physical pain can traumatize victims physically, mentally, and emotionally. Victims may suffer adverse consequences of intense fear and inhibition against telling the truth. Psychological torture differs from physical torture because it does not inflict obvious damage; examples include blindfolding individuals, death threats, sexual humiliation, and exploiting phobias. Prolonged deprivations (e.g., food, sleep, sensory information) may become torture. Various deprivations have caused weakness, organ failure, death, lowered performance, hallucinations, anxiety, antisocial behavior, and depression. Our review enlightens discussions of torture by defining it clearly and clarifying treatment guidelines. A presentation of relevant psychological perspectives on torture may draw more psychologists into making public valuable statements or conducting research that helps citizens make more informed judgments on questions about the use of torture.

Lang, Casey WHERE IS RUSSIA HEADED?, Dr. Jean-Philippe Faletta, Political Science

This study examines what direction Russia is heading in, in terms of their government. After the rise of Lenin, Russia fell into the hands of dictators, communists, socialists, and oligarchs. However, the fall of Communism brought new hope for the Russian people and for the future of the country. Many felt they would be given new opportunities, and that new government officials would lead the country in a more positive, democratic direction. However, there has been much debate about where the country is headed. Is it moving more towards democracy? Or is it moving back to the traditions of the Soviet Union? Are the oligarchs still very much present in the country today? Is Putin the man he says he is? Is there a correlation between government policies and evolving Russian political opinion? This study investigates these questions by examining public opinion polls in Russia, past and present, and comparing these polls to actions taken by the government.

Le, Thuy; Montes, Miguel; Fuson, Kerry; Sutton, R. Bryan, PURIFICATION AND CHARACTERIZATION OF SYNAPTOTAGMIN C2A AND C2B DOMAINS IN DROSOPHILA MELANOGASTER, Dr. Terry Hall, Honors

Commonly found on the membrane of synaptic vesicles, synaptotagmins are proteins that bind phospholipids and are involved in Ca²⁺-dependent exocytosis and Ca²⁺-independent endocytosis in neurons. Synaptotagmins are characterized by a transmembrane domain joined to two homologous C2 domains by a linker. The properties and structure of synaptotagmin hint at a regulatory function in the synaptic vesicle pathway and therefore synaptic transmission. Consisting of eight strands of β-pleated sheets, the C2 domains of synaptotagmin act as a sensor for Ca²⁺ ions. By interacting with the SNARE (soluble N-ethylmaleimide-sensitive factor attachment protein receptor, SNAP receptor) complex. synaptotagmin C2 domains regulate the fusion of vesicles with membranes and therefore regulate the exocytosis of neurotransmitters. As such, defining the structure of C2 domains will prove to be a valuable resource for functional studies. This project is aimed at the extraction and purification of synaptotagmin for the purpose of crystallization. Once crystals have been realized, diffraction patterns obtained through x-ray crystallography can be used to deduce a structural model of the C2A and C2B domains of Drosophila melanogaster. Cloning and expression of Drosophila synaptotagmin have been achieved. Purification, using the techniques of affinity chromatography, ion exchange chromatography and gel filtration, was performed. Further characterization of the protein, using SDS-PAGE gel electrophoresis, mass spectroscopy, circular dichroism, primary structural comparisons, secondary structural prediction and homology modeling, was also conducted. Preliminary crystal screens are expected to yield quality crystals for further analysis.

LeCompte, Amanda, JAPHET CREEK: A WATER QUALITY ANALYSIS, Dr. Maury Harris, Environmental Studies

Trash, polluted runoff, and dumping of industrial/construction wastes is taking its toll on Japhet Creek, located on the east side of Houston (Fifth Ward). The area is a mixture of light commercial and industrial facilities, interspersed with neighborhoods. Japhet Creek is exposed at the surface between Clinton Drive and the Buffalo Bayou. The stormshed for Japhet Creek extends northwards to Interstate 59 and the railyards and drains a varied ground surface into the creek.:: The purpose of this study is to determine the water quality, and if any of the trash and refuse dumped into the creek is having an effect on the water

quality in the section between Clinton Drive and the Bayou. Samples were collected at seven localities along the creek and analyzed for a variety of chemical components, such as phosphates, nitrates, dissolved/suspended solids (turbidity and conductivity), and dissolved oxygen. It is hoped that the results of this study will allow the local area community to turn Japhet Creek into a green corridor, or finger to the Bayou for the enjoyment of the entire community.

‡Leonard, Patrick, SPOKEN HERE: RECLAIMING THE MALISEET LANGUAGE, Prof Daryl Gray, Journalism and Religious Studies

This presentation documents efforts to preserve the Maliseet language in the Fredericton area. Maliseet has been under assault through assimilative education models that once involved punishment for speaking one's native tongue. Today, while Maliseet language classes are available at several local schools, they do not produce fluent speakers. The presentation will have a strong emphasis on reporting and the perspectives of living Maliseet speakers.

LeRoy, Tamar, THE EAST IN JOSEPH CONRAD'S "LORD JIM", Dr. James Barloon, English

Joseph Conrad's portrayal of the East in the novel "Lord Jim" and other tales such as "Youth" and "Karain" is infused with a Romantic and post-Romantic fascination with the Orient. Evoked in such a perception of the East in the Western mind is a dream-like sense of distant lands which are vast, ancient, and have been unchanged for centuries, as well as contrary images of peace and cruelty; a world of extremes peopled with pristine figures and modes of life. In "Lord Jim" in particular, Conrad questions and dissects to some extent this Romantic conception of the exotic and mysterious Orient, whereas in "Youth," written contemporaneously, this fantasy of the East is left unquestioned. In the novel Jim flees farther and farther east to escape from the memory of his transgression, but is his romantic fantasy reborn in far-eastern Patusan? Patusan and its inhabitants have an "Arabian Nights" quality; the land itself is of undefined geography, almost hidden in the jungle from the rest of the world, and the characters and their passions are presented as archetypal, legendary, and extreme. Yet distinctions between categories of East and West often become problematic and contradictory within the novel, and it remains open-ended as to whether or not Jim's romantic fantasy is finally fulfilled in the East.

Lee, Anthony, WHERE MY PARENTS GREW UP: A PERSONAL LOOK AT PANAMA'S RECENT RELATIONS WITH THE UNITED STATES, Dr. Virginia Bernhard, History

Panama has been a part of the Latin American culture since the Spanish conquest. It was the site of the discovery of the Pacific Ocean and was designated as a major checkpoint for Spanish trade routes. However, the biggest discovery was the narrow isthmus that would be the site of one of the greatest engineering feats in human history: the Panama Canal. Only 47 miles long, the canal was the center of political conflict between Panama and the United States. The latter was granted full military and civilian control in perpetuity in 1903. The Panamanians were outraged by this act of American imperialism. For almost a century the Panamanian government tangled with U.S. foreign policy. Total control was never the issue until protests and violence consumed Panama in the 1960's. A significant student protest led by a radical school in the capital caught the U.S. off guard and was followed by corruption, schemes, and coups in the ultimate purpose of driving the Americans out of the country. The Carter-Torrijos Treaty of 1977 that finally granted Panama total canal control was only part of the puzzle. Some of the citizens of Panama who were caught in the middle of these events included my family. With their observations and recollections along with old publications, this project presents a different and deeper look at what happened in Panama.

Lenotre, Gaston, ON HOPE, Dr. Theodore Rebard, Philosophy

In a century apt to despair, two notable Christian philosophers engage the subject of hope in diverging ways. Josef Pieper (1904-1997), a German schooled in the thought of St. Thomas, examines hope as both a natural and a super-natural virtue heavily inter-related with other virtues such as faith and love. Gabriel Marcel (1889-1973), a French Catholic convert from atheism, follows the existentialist tradition by

studying the concrete phenomenon of (what it means to say) "I hope" which he believes can only be experienced in captivity. As opposed to Pieper's systematic exposition is Marcel's unsystematic exploration, yet in many significant ways both thinkers converge.

Lopez, Arturo TAIWAN AS A POLITICAL RISK FACTOR IN EU/PRC AND US/PRC ECONOMIC RELATIONS, Dr. Gustavo Wensjoe, International Studies

With the growing tension between the People's Republic of China and the United States, political risk factors are increasingly more important influences foreign investment in East Asia. Much of the extant research contrasts the relationship differences between U.S. - PRC and the EU- PRC relationship. The question at hand is two fold; do the economic and foreign policies of France and Germany toward Taiwan affect investment in the People's Republic of China? The European Union, unlike the United States, has little direct political or ideological attachment with Taiwan, and as of consequence, and according to the research has tended to enjoy a superior economic and diplomatic relationship with the PRC. In conjunction with recognition of China as a growing economic juggernaut, do the contrasting EU and U.S. diplomatic and economic policies toward Taiwan affect foreign investment in the People's Republic of China? I plan to begin with the Political Risk Model as a starting point for an empirical test of my questions. This study will utilize the data and literature to support just how vital political decisions are to foreign, specifically European and American, investment in China. According to present scholarly conclusions, although the European Union does appear to enjoy a favored political position with the People's Republic of China, the United States as the dominate economic influence in China is not hindered with reference to foreign investment as the PRC continues present economic development.

Lopez, Nancy A.. THE 1994 MEXICAN PESO CRISIS: WAS THE RESPONSE ADEQUATE OR FLAWED? Dr. Mehdi Noorbaksh, International Studies

Following the financial crisis of 1982 and 1986, Mexico began to advertise a healthy investment environment to attract foreign direct investment and portfolio investment to offset the country's escalating external debt. However, despite many measures to stabilize the economy, on December 20, 1994, the Peso Crisis was made public, leading to further economic deterioration. The argument of this paper is that the Mexican Peso Crisis was the product of both external and domestic factors, such as the over confidence of external finance sectors, discrepancies within government regulations, and internal mismanagement of domestic financial institutions. In the assessment of the peso crisis there are four major distinguishable themes that were of great importance: 1) the overvalued currency rate of the Mexican Peso; 2) alleged mismanagement of bank regulations, since the Bank of Mexico was accountable for the control of the peso-dollar exchange rates; 3) the possibility that the political party in control of the administration at this particular time encouraged fraudulent activity and corruption within the country's economy and society; and 4) low savings rates in Mexico, since the country did not have a sufficient savings percentage. This paper will analyze the above themes as well as the response by the International Monetary Fund, the Exchange Stabilization Fund of the U.S. Department of Treasury, the Federal Reserve, the Bank of Canada, and Bank for International Settlements to present a clear assessment of the 1994 Peso Crisis and its contributing factors.

Maniha, Mark A., PROMOTING POLITICAL STABILITY THROUGH OUTSOURCING: WHAT INDIA CAN TEACH THE MIDDLE EAST, Dr. Jon Taylor, Political Science

The outsourcing of jobs from the United States to India has had both a profound and positive impact on both nations. While it is not necessarily a popular idea within the United States, scholarly research suggests that the very fact that jobs are being outsourced is a sign of American economic vitality. Additionally, the remarkable transformation of India from a socialist to market economy, and the simultaneous rise of a burgeoning middle class, would not have been possible without outsourcing. This paper hypothesizes that the outsourcing of jobs can provide a model of both economic viability and political stability which can be emulated in other parts of the developing world. Specifically, the paper proposes that since the situation in the poorest regions of the Middle East parallels much of the state of affairs in India from a decade ago, the use of outsourcing could provide the economic stimulation necessary to assure political stability, which is crucial to any plans to permanently alleviate the crisis.

Matyshnyuk, Mariya, AMERICAN GLOBALIZATION Dr. Mehdi Noorbaksh, International Studies

One of the ways to describe the process of globalization is, as a political, economical and cultural integration of countries around the globe. The end of the Cold War opened a new era in the globalization process. This era is characterized by rapid mass development and the spread of information technology. The United States, a leader in technological innovation became a leader in the new globalization era. American ideas and culture came to spread around the world. Today "globalization", "modernization" and "Americanization" are being used as synonyms.

One of the most argued points is "American" globalization contributing to the unevenness of the globalization process.

- ✓ The first section of the paper will discuss the Neo-Liberal approach closely associated with the US and its implications on wealth distribution.
- ✓ The second section of the paper will consider US consumerist culture promoted by the multinational companies.
- ✓ The third section of the paper will investigate the US contribution to the establishment of free and fair trade in the global market.

The US is a strong and consistent contributor to the globalization process. It was inevitable that American culture would be shared with other nations as a result. While there are many positive aspects of "American" globalization it is not the concern of this paper. The paper will pass judgment on the contribution of "American" globalization to the unevenness of the globalization process by examining some of the most controversial topics associated with the argument.

McRae, Mollie, OUR SUBSTANCE AND CONTENT, Dr. Janet Lowrey, English

For my senior thesis, I have chosen to produce a creative work. This work will be a body of poetry arranged in a sequence of sestinas (a French syllabic form of six sestets and a final three line stanza, the envoi.) Three to four "Sestina Sets" will include one opening sestina accompanied by six minor poems. Each opening sestina will serve as a table of contents for the six minor poems in each set. Each minor poem will focus around one of the end-words used in the opening sestina. The minor poems are not restricted in form. Each "Sestina Set" will be formed around a dichotomy within human experience. For example, the first set focuses on the relationship between the carnal side of human sexuality and the Divine act of procreation. The intent of each "Sestina Set" will be to marry two such ideas that generally exist in opposition to one another. Many of these opposites are intrinsically bound to one another, and I aim to bring those relationships to the surface.

Medina, Salomon D., SANCTIONS REGIMES: THE NEXT STEPS, Dr. Gustavo Wensjoe, International Studies

Since the end of the Cold War sanctions have become the instrument of choice for many powerful states. In spite of the enthusiasm for what was deemed to be a peaceful instrument of coercion, and an alternative to war, questions about the viability of sanctions have come to be raised by a number of international organizations and states after witnessing the effects on the targeted country. In some cases, sanctions regimes have had significant unanticipated negative impacts on human life and health, have produced a "rally-around-the-flag" effect, and have undermined domestic opposition elements that might have assisted in the success of the sanctions regime's objective. In addition, the issue of third-party sanctions impact has further complicated this issue. In the late 1990s and into this present time, international organizations and states have begun a campaign to refine sanctions regimes in order to increase their effectiveness and decrease their negative secondary and tertiary impacts. Though the empirical evidence does seem to argue for this refinement, the debate over the use of conventional versus targeted sanctions, or an alternative policy position of engagement, continues. This paper will argue that in order for sanctions to be effective, they must be multilateral, targeted, and placed in a context that incorporates a policy of engagement.

Montealegre, Sandra, TURKEY, PROSPECTIVE MEMBER INTO THE EUROPEAN UNION, Dr. Mehdi Noorbaksh. International Studies

Can the European Union budget one more? During these past years ten new countries have joined the European Union and there are currently four more countries in candidacy. They are Bulgaria, Romania, Croatia, and Turkey. Of the four, Turkey is the most controversial. Turkey, if admitted, would be the most populous state with a Muslim majority. From the European viewpoint, there is an increasing fear that Turkey would create unemployment, strong competition from low cost labor, and an influx of immigrants. There has been resistance from European countries such as Austria and Germany declaring that Turkey would create a huge economic, political, cultural burden. Others instead view Turkey as a gate of economical opportunity, stabilization of world security, and improving the overall standard of living. So the questions remains, is there room for one more? Is Europe ready for Turkey and is Turkey prepared to meet European demands? The main purpose of this presentation is to provide information as to why Turkey should be admitted into the European Union by the year 2020.

Myers, Amanda, INDEBITATUS ASSUMPSIT: EMERGENCE, DISAPPEARANCE, AND RESURRECTION IN MODERN JURISPRUDENCE, Prof. Charles Young, Political Science

The modern day law of contracts has developed over a long period of time with many legal twists and turns. At the root of modern contract law is the medieval writ indebitatus assumpsit. Assumpsit's historical antecedents include Anglo-Saxon origins, Norman procedures, and the creation of the common law itself. Conflict over the use of the ostensuraus quare writ, indebitatus assumpsit, led to the ultimate development of both contract law and tort law. In order to fully understand this important phase of common law development, it is necessary to examine the English writ system. Although today we only use a single form of the cause of action, hidden in pleadings that may be Roman in origin, the basic principles of indebitatus assumpsit are still present. It is my intent to offer an explanation for the emergence, disappearance, and resurrected indebitatus assumpsit in modern jurisprudence.

Nanez, Liliana, DETERMINING THE PRESENCE OF CYSTEINE PROTEASES IN WHOLE BODY BEMISIA TABACI EXTRACT Dr. Rosemarie Rosell, Biology

Bemisia tabaci whiteflies are of special importance in agriculture because of their ability to serve as vectors for Begomoviruses. Begomoviruses consist of single stranded DNA contained inside a protein coat. When whiteflies feed on the phloem of infected plants, they ingest virions that can then be transferred to non-infected plants during subsequent feeding events. Past studies have indicated the presence of proteases in whole body whitefly extracts. The overall objective of this study is to determine the specific cysteine protease(s) present. Cathepsin B, a known cysteine protease, was used in both native and SDS polyacrylamide gel electrophoresis assays. The gels contained gelatin as substrate and proteolytic activity was determined. Protease inhibitor E64, a known Cathepsin B inhibitor, was used to determine if the protease activity is related to cysteine protease activity. Future studies on the location of cysteine protease in the whitefly will help to better understand the reason why Begomoviruses do not get degraded in the digestive system of the whitefly.

Nasser, Jessica, GLOBALIZATION AND CORPORATE SOCIAL RESPONSIBILITY: EVOLVING ARENA OF CONFLICT AND COLLABORATION, Dr. Gustavo Wensjoe, International Studies

Globalization has dramatically altered the global economy. While it is impossible to deny the changes created by the dynamic forces of globalization, it is complicated to gauge the levels of benefit globalization has produced. Multinational corporations (MNCs) constitute the prime engines of globalization. MNCs can be seen as healthy and advantageous, however, they can also be viewed as detrimental to the welfare of states across the globe.

The new phase of globalization involves a deeper consideration for resources and communities. The concept of corporate social responsibility (CSR) has emerged as a possible solution to the sustainability problems and as part of basic business practice. States and nonstate actors have pressured MNCs in the adoption of meaningful CSR programs. This paper will examine the validity of CSR regimes and the scope and implications of CSR for the global community.

This paper will look at globalization and its implications since the 1990s and will inspect the compelling role of MNCs as the engines of globalization. It will examine the changing roles of states and nonstate actors as stakeholders and the convergence of their positions and the activities of MNCs. The discussion will look specifically at the results of CSR policies and partnerships which promote CSR.

The author expects to prove the significance of corporate responsibility to ensure the long-term sustainability of world markets and global communities. The author's expected results are an endorsement of internal and external CSR regimes, and to promote partnerships and cooperation on the part of all stakeholders.

Navarro, Ivan, THE MASS MEDIA'S BLESSING, Sr. Paula Jean Miller, Catholic Studies

Journalists and reporters everywhere have an obligation to inform people with accuracy, truth, and objectivity. This obligation is very basic but, ethically speaking, reporters and journalists have the capacity to do a greater service for humanity through the mass media, by helping each individual to achieve ultimate happiness and unite different communities. The Pontifical Council for Social Communications expresses this potential in their document "Ethics in Communication". This document introduces a principle which states that "communication should be by persons to persons for the integral development of persons and the common good of the communities where [the media] belongs". This principle plays an indispensable role in the field of social communications because it calls all the communicators of the mass media to serve the human person, to avoid violations against the common good of people, and to help people achieve their ultimate end. In this presentation I do not wish to criticize today's use of the mass media, but rather be a light that shines on the truth of the great good that the mass media of social communications is capable of doing for each human being and societies.

Nguyen, Nam, A POTENTIAL ROLE FOR A VERTEBRATE TRANSRIPTIONAL REGULATOR REQUIRED FOR EYE DEVELOPMENT IN SEA URCHINS, Dr. Debra Bramblett, Biology

Bhlhb4 (basic helix loop helix beta 4) is a transcription factor that has been identified and demonstrated to be responsible for the regulation of neuronal development and rod bipolar development in mice (Bramblett et al., 2006). Recently, the Baylor College of Medicine Human Genome Project embarked on a project to sequence the genome of the sea urchin *Strongylocentrotus purpuratus*, which allowed for the identification of a genomic sequence identified as Scaffold20271, which has an open reading frame that can be translated to an amino acid sequence that yields a 91% identity to the basic helix loop helix domain of mouse Bhlhb4. Accordingly, this poster demonstrates the various algorithms that were used for such sequence analysis and our attempt to subclone a potential homologue of mouse Bhlhb4 from *S. purpuratus*'s close relative, *Lytechinus variegatus*, by PCR and TOPO TA subcloning strategy. As a future goal, the subcloned product will be used as a tool in transfection experiments using P19 and HeLa cells to examine the functionality of this putative sea urchin Bhlhb4. In addition, we also look forward to future analysis of the expression pattern of this potential sea urchin Bhlhb4 through the use of in situ hybridization techniques and Northern blots. Contingent upon the completion of these future goals, a better understanding of the evolution of the Bhlhb4 can be obtained.

Nguyen, Tam, AN ANALYSIS OF VIETNAMESE-AMERICAN CULTURAL ISSUES AND POLITICAL PARTICIPATION, Dr. Jon Taylor, Political Science

Little scholarly evidence exists that examines the relationship between Vietnamese-Americans' level of English proficiency and their participation in the American political process. Studies of immigrants generally offer only an indistinct and quite limited examination of how newcomers adapt to American life, ignoring the specific qualities that make their different cultures unique. This analysis will attempt to provide information on Vietnamese-American cultural values while also seeking to demonstrate the role of English proficiency in political participation in the United States. The paper will seek to examine the role that language proficiency plays in political participation among Vietnamese-Americans. The analysis will consider the impact of the relocation of Vietnamese-Americans to the United States, as well as the influence of cultural values that have profoundly affected the way they have assimilated into American life. Additionally, the paper will address issues regarding the effect of resettlement and the progress of the community from involuntary expatriates to permanent residents. Further, a discussion of the role that

English proficiency plays in the political enculturation of Vietnamese-Americans will be offered. The paper will conclude by addressing the political participation factors that have led to the rise of the Vietnamese-American community as a political force, both nationally and locally. Suggestions will also be offered regarding future research on the impact of English proficiency on the political participation of other limited-English proficiency groups.

Nguyen, Tung; D'Souza, Jill; Jabbour, Natalie, MASS SPECTROMETRY CHARACTERIZATION AND BIOACTIVITY OF LEAF EXTRACTS FROM LIGUSTRUM SPP, Dr. Thomas B. Malloy, Jr, Chemistry

We have extracted ligustrum leaves with both non-polar (hexane) and polar (acetone) solvents to obtain data for bioassays and chemical characterization. The resulting extracts have shown significant biological activity. There is a highly significant decrease in germination and growth for both monocots *Agrostis stolinifora* L) and dicots *Latuca sativa* L.) The polar and non-polar extracts have been characterized by both chemical and electron ionization gas-chromatography-mass spectrometery. In addition, portions of the extracts have been modified with derivatizing agents and the resulting samples characterized by both EI and CI mass spectrometry. These studies are preliminary to determining the agent(s) imparting natural herbicidal activity to these ornamental species.

Nguyen, Quynh Tram, CULTURAL TRANSFORMATION THROUGH DIALOGUE: THE CASE OF VIETNAMERICAN CATHOLICS, Sr. Paula Jean Miller, Catholic Studies

Studies have shown the impact of globalization—the process whereby the world becomes a smaller place—on social, political and economic realms. In an effort to understand Samuel Huntington's Clash of Civilizations, the world has been subdivided into East and West, implying opposite ways of thinking and experiencing cultures. Since it is only within cultures that the Catholic faith is embodied and given full expression, conflict among cultures seems inevitable within the living, universal Church. But the Church also believes that the underlying truth of the faith unifies humanity even as it preserves, transforms, and purifies the diversity of cultures from within. This is the paradoxical reality of a universal Church composed of local churches, that is called to redeem cultural divisions and bring them into a unity of creative tension. Pope John Paul II in his Dialogue Between Cultures for a Civilization of Love and Peace states, "it is dialogue which protects the distinctiveness of cultures as historical and creative expressions of the underlying unity of the human family, and which sustains understanding and communion between them. This study will examine the dynamics of the inculturation of the Catholic Faith within the Vietnamerican diasporas and will identify those elements unique to the Vietnamese culture that inhibit and those that embrace the Catholic faith.

Nicholl, Tamara, THE SIGNIFICANCE OF PLACE: BALI AND THE UNITED STATES, Dr. Linda Pett-Conklin, International Studies

Place, says psychologist Gary E. Holmes, "is such a basic part of life that it often goes unnoticed." This very basic quality of place makes it important to study, for perhaps by understanding human's interaction with place, there is to be found some solution to social difficulties. Place includes both the naturally occurring world and the built-environment (infrastructure, architecture, and art). Built place is itself a communication that not only reflects the worldview and values of its creators, but once created, exerts a powerful influence on all those who encounter it, on both conscious and unconscious levels. Place, on an individual level, has the power to affect emotions, psychological states, and inform identity – it is the context for human interactions. This paper seeks to provide a model to explain the reciprocal interaction between place and humans, showing that there is a feedback loop between the two. The built-worlds of Bali and the United States will provide concrete comparisons to illustrate these abstract concepts. Special attention will be paid to places considered sacred, since these embody a society's most conscious relationship with its environment. This paper will show that the powerful two-way relationship between man and place, once understood, can be leveraged to social ends, and that understanding the nature of this relationship will allow for better decisions to be made by anyone playing a role in the creation of place, be they city planner, developer, civil servant, or citizen.

Ocampo, Alfredo, THE RICH SPIRIT OF THE POOR CLARE OF ASSISI, Sr. Madeline Grace, Theology

St. Clare of Assisi has attracted the attention of church historians through the centuries because she embodied in her own personality, and religious rule, the Privilege of Poverty, which is the essence of St. Francis' spirituality and charism, and his patrimony to his brothers and sisters. The Privilege of Poverty was a radical, joyful and dignified poverty that Clare courageously accepted, and Francis testified to by saying, "you have chosen to live bodily enclosed and to serve the Lord in the highest poverty that, in freedom of soul, you may be the Lord's servant," (Rule of St. Clare). Consequently, Clare and the women who followed her expressed through this Privilege of Poverty their love of and commitment to God by being in complete solidarity with the poorest of their times. It was therefore Clare's self-assurance and conviction about her mission, and the tenacious courage of her personality, that made her the first religious woman to write her own monastic rule; one which would receive the approval of the highest ecclesiastical authority of her time. Clare's heroic acts also make her a model and inspiration of a religious vocation for all times. The purpose of this research is to highlight the most important events unfolding in Clare's life, and the significant contribution to the history and development of the Catholic Church that she has provided.

Ona, Razel Junne, SELF-ESTEEM AND PROSOCIALNESS, Dr. Jo Meier, Psychology

Self-esteem involves the satisfaction of an individual's self-evaluation. Prosocialness, a new concept of extraversion, involves an individual's social adjustment. This research investigation was designed to explore the relationship between self-esteem and prosocialness. The 10-item scale used to measure levels of self-esteem is called the Rosenberg Self-Esteem Scale. Preliminary analysis displayed a reliability coefficient of .861. And the 16-item scale used to measure prosocialness is called the Prosocialness Scale for Adults, which gave a reliability coefficient of .898. An exploratory factor analysis of the scales yielded two factors (for self-esteem) and four factors (for prosocialness) that gave eigen values greater than one. All data for this research was collected from the World Wide Web providing participants convenience and easy access to the study. And at the same time, pervious research has proven that the ability of the participants to complete questionnaires in the comfort of their home (their own normal environment), rather than in a less familiar laboratory setting (Reips, 2000) had produced greater validity in participant response. Participants attending University of St. Thomas and University of Houston – Clear Lake were recruited from psychology classes in Fall 2005 and Spring 2006. 82 students, ages 18 to 54, both male and female, and from various ethnic backgrounds participated in this research experiment. Discussion of the scales is included. This study resulted in a significant correlation in the relationship between self-esteem and prosocialnes. Future research may focus on gaining and comparing results from various geographical areas and populations outside of the universities.

Outlaw, Rachel, ANATOMY OF A PRODUCTION, Prof. Claire McDonald, Drama

An audience sees only the finished project but much goes into putting on a play. This project will examine the production of a one-act play. I will discuss the roles of designer, director, and actor, illustrating the immense effort required to bring a play to the stage. Examples of tools such as concept drawings, set models, and prompt books will be shown to demonstrate the various steps a play takes before opening night.

Price, Katherine, GOD AT THE BALLOT BOX: THE INFLUENCE OF RELIGION ON THE 2004 PRESIDENTIAL ELECTION, Dr. Jean-Philippe Faletta, Political Science

One of the core motivations of the founders of the United States was to establish a system, which granted its citizens freedom to practice their religious beliefs. The First Amendment to the Constitution guarantees freedom of religion. The establishment clause is a provision of this amendment that does not allow for a governing body to show favor towards any particular religion. Despite legislative measures, there has always been discord among the people in matters involving church-state relations. Accommodationists interpret the clause as simply impeding Congress from establishing an official public church. Those who subscribe to the "wall of separation" theory, feel that the government should not have

any involvement in religious affairs. Inescapably, since the colonial period, the political and religious realms have always coincided, as they both regard values and concern power over the lives of people. In recent years however, political officials have become more audacious in voicing their religious beliefs. This was most evident in the recent presidential election. Countless Americans are part of the "churchgoing" community, and their votes were heavily sought after by the presidential hopefuls. The purpose of this work is to examine how "religious" issues affected the candidates and their platforms, and how the voters were influenced by their own religious beliefs when casting their votes.

Perez, Nataly. Garza, Vanessa, INDUCTION OF SUPEROXIDE DISMUTASE (SOD) IN *AMERICAMYSIS BAHIA* EXPOSED TO SALINITY STRESS, Dr. Joanne Romagni/Dr. Ruth Ann Bagnall, Biology

Americamysis bahia, are small, benthic, or hyperbenthic crustaceans that have been identified as EPA biomonitor organisms. They are a fundamental component of estuarine food webs. They tend to be abundant in most estuarine and near shore habitats where they contribute immensely to the trophic structure and serve greatly in indicating the environmental quality of their marine habitats. When stressed by various environmental factors, such as changes in salinity or temperature, superoxide dismutase (SOD), which functions in protecting the cells against oxidative stress, is induced. Our study entails the use of spectrophotometric assays, native gels, and IEF gels to determine the different forms of SOD isoenzymes produced. We will also quantify SOD activity. The objective of this preliminary study is to document responses of mysids to environmental stress. Future studies will document the effects of stress on other stress enzymes, such as ascorbate peroxidase, glutathione reductase and heat shock proteins.

Perrin, David, LITERARY CRITICISM, Dr. Shannon Forbes, English

I plan on comparing and contrasting two twentieth century American short stories, "The Secret Life of Walter Mitty" by James Thurber and Sandra Cisneros' "The House on Mango Street." These two works will be analyzed mainly through a Structuralist and New Critical interpretation. The two stories center around main characters who want something better in their lives. Walter Mitty constantly retreats to a fantasy world to escape his reality. In his fantasies, Mitty is always powerful, respected, admired, while in reality he is the complete opposite- patronized, laughed at, and made fun of- both by his wife and complete strangers. The narrator of Cisneros' "The House on Mango Street" also longs for a change in her reality. She fantasizes about the perfect house for her and her family to live in, only to accept the reality that the perfect house may never come along. Both stories involve the binary operation of reality/ fantasy. Within this binary operation, two very different main characters- a middle aged, middle class Walter Mitty and a little girl from a low income family- both fantasize about a better life that never becomes realized.

Perry, Jason, INTERNET LIBEL LITIGATION, Prof. Charles Young, Political Science

Many internet users find themselves as victims of online defamation. This work explores the evolution of libel and defamation statutes from their common law roots to internet application. I also explore pitfalls in libel litigation including issues of personal jurisdiction, time restraints, and evidence. By looking at scholarly works and a plethora of case law, I have been able to trace some past and current internet libel and defamation litigation. The results tend to show that internet: users have very limited legal rights online and most often are unable to obtain judgments against defamers. Identity of anonymous defamers is the biggest problem. Internet users have limited rights but they can be easily learned.

Prihoda, Nathan, A SHATTERED IMAGE: FROM THE BEGINNING IT WAS NOT SO, Sr. Paula Jean Miller, Catholic Studies

On September 4, 1969, Gov. Ronald Reagan of California signed the Family Law Act of 1969. On January 1, 1970 the first divorce in the United States was granted on grounds of "irreconcilable differences". Thus began the era of no-fault divorce. Today, half of all marriages entered into in the United States ends in divorce. By considering Catholic tradition regarding the nature of marriage and the family, a careful observer can come to a better understanding of divorce's spiritual and psychological effects on

family and society. This understanding is reinforced and expanded through contemporary research on the effects of divorce upon children by Judith Wallerstein and other psychologists.

Prihoda, Nathan, Barrera, Monica; Ibrahim, Razeena; Mireles, Heather, THE PSYCHOMETRIC PROPERTIES OF MONTEI, ADAMS, AND EGGERS' ATTITUDES TOWARD DIVERSITY SCALE, Dr. Ly Phan, Psychology

This study examines the psychometric properties of Montei, Adams, & Eggers's the Attitudes Toward Diversity scale (ATDS, 1996). According to Nunnally (1978), attitude is an individual's acceptance of minorities, primarily non-Whites, in the working environment. The adapted 12-item scale measures attitudes toward diversity as they relate to (a) coworkers, (b) supervisors, and (c) hiring and promotion decisions. We will survey 960 full-time employees in the Houston Metropolitan areas, the participants are employed in a multitude of career fields including marketing, sales, health care, engineering, law, and general management. We will conduct reliability analysis of the ATDS scale reliability and will perform factor analysis on the adapted twelve-item measure. The report will include discussion of the scale psychometric properties and propose suggestions for future research using the ATDS.

Rajan, Jessen, Le, Thuy, INDUCTION AND ACTIVITY OF SUPEROXIDE DISMUTASE (SOD) IN *AIPTASIA PALLIDA*, Dr. Joanne Romagni, Biology

There are a variety of enzymes that act as defense chemicals under stress conditions. One of these is superoxide dismutase (SOD). The role of SOD is to scavenge free radicals, including singlet oxygen and superoxide radicals, to prevent eventual peroxidation of membranes and cell death. In this study, we have documented the induction and activity of SOD isozymes in the symbiotic anemone, *Aiptasia pallida*, under chronic and acute stress. Our objective was to determine the advantages of the symbiotic relationship under common environmental stresses. We have documented the responses of symbiotic anemones, aposymbiotic anemones and isolated algae (*Symbiodinium* sp) to both chronic and acute salinity and temperature stresses. We have determined that there is one constitutive isozyme in the anemone A. pallida. For the two induced isozymes we observed, it would appear that a minimum of 48 hours is needed for biosynthesis. Using Western blotting and protein isoelectric focusing, we will be able to determine detailed characteristics of these isozymes. In quantifying SOD activity, we found that aposymbiotic anemones have a significant increase over symbiotic and the control anemones. Isolated algae exhibited no change under stress conditions. Since sea anemones are a model system for coral, which have the same symbiotic relationship with algae, better understanding of stress response mechanisms of anemones may give us greater comprehension of the causes of coral bleaching.

Randall-Cedeno, Emily, TRANSATLANTIC RELATIONSHIP DISRUPTIONS: THE CENTRALITY OF TRADE DISPUTES, Dr. Gustavo Wensjoe, International Studies

The political and economic ties between the United States (U.S.) and the European Union (EU) arguably create the strongest partnership in the world. They have a long history of collaboration in areas of conflict resolution, trade, finance, promotion of democracy, and global governance. Nonetheless, their interests and stances are at odds, leading to competition and confrontation. Differences have become more apparent in the last decade in the midst of globalization. This is especially true in their trade relationship. The process of trade liberalization calls for more open markets and less protected domestic sectors, resulting in disputes across the Atlantic. This study first examines the historical relationship between the U.S. and Europe by outlining significant agreements between them since World War II. Then it will examine contributing factors to the transatlantic disputes over trade and other matters. Agriculture and civil aircraft manufacturing trade disputes play a significant role in causing bitterness between the U.S. and the EU. Clearly, the U.S. and the EU have different agendas as they respond to domestic and national interests. Unless they become more willing to compromise and pursue more effective cooperation and negotiation, it may very well be inevitable that they will veer towards divergent paths. This paper argues that in the global arena, the EU and the U.S. share underlying goals on the same foundation. It is important that these two great powers maintain the integrity of their relationship and maintain their roles in global governance and trade, which is consistent with their overall interests.

Repsher, Miranda, SIN AND THE INDIVIDUAL IN HAWTHORNE'S SHORT STORIES, Dr. Shannon Forbes, English

My senior thesis, entitled "Sin and the Individual in Hawthorne's Short Stories" explores Nathaniel Hawthorne's treatment of sin. I propose that Hawthorne sees sin as destructive to the individual because this sin leads to a loss of faith in others and a general distrust of human nature, causing the individual's withdrawal from society into solitude. This solitude, however, leaves the individual even more vulnerable to evil's beckoning and the individual may be further drawn into sin, thus completely severing his tie with God. This proposal is supported with evidence found in Hawthorne's "Ethan Brand" as well as "Young Goodman Brown."

Roch, Jessica, POLITICAL REPRESENTATION AND MARKET LIBERALIZATION IN ARGENTINA: EXPLAINING THE RE-ACCOMMODATION PROCESS, Dr. Gustavo Wensjoe, International Studies

Corporatist frameworks with highly structured relationships are denoted by little flexibility, reducing reaccommodation options. On the other hand, the less structured the relationship between the state and an actor, the higher will be the level of flexibility, yielding a wider range of re-accommodation options. This paper will examine the dramatic social and economic changes that have shaped Argentine corporatism at the end of the 20th century: the democratic transition of 1983, the market liberalization and economic restructuring undertaken during the Menem administration, and the peso crisis of 2001-2002. The thesis of this paper is that the Argentine corporatist system, characterized by informal relationships lacking hierarchical institutional structures, enabled and allowed internal restructuring and shifts in strategies of both the Peronist party and labor unions, while not alienating the working class, traditional actors in both groups. The literature review reflects the historical development of organized labor and the Peronist party, the evolution of Argentine corporatist framework and current political commentary and lively debate regarding the theoretical implications of these new patterns of representation.

Ross, Dustin, CULTURE MATTERS: QUESTIONING THE CULTURAL UNIVERSALITY OF NEOLIBERAL REFORM, Dr. Hans Stockton, International Studies

Despite the abundance of resources and expertise directed toward improving the social and economic conditions of the developing world, a significant number of these economies have experienced limited progress. This study suggests that one cause for such performance is that mainstream development policies fail to incorporate certain significant variables, such as culture. Culture defines how one interacts with their environment, including the degree of trust extended to others, attitudes toward creativity and innovation, and feelings toward competition; factors that influence one's receptivity to the liberal capitalist framework associated with current neoliberal development policies. This study examines the degree of influence of such values on neoliberal policies, arguing that certain cultures are more receptive than others to the tenets of neoliberalism. Using the World Values Survey (WVS), these variables are analyzed alongside social and economic indicators of states who, in recent years, have adopted neoliberal reform. The implications of this study concern the degree to which: a) development policies should demonstrate flexibility for cultural deviations, or b) cultural values compatible with these policies should be promoted within these societies.

Russian, Natalie, MOROCCAN IMMIGRATION TO SPAIN: A CULTURE IN TRANSITION, Dr. Linda Pett Conklin, International Studies

Moroccan migration to Spain has created opportunities and challenges for both cultures. When Moroccans migrate to Spain they undergo a fascinating cultural change where the adjustments are made rapidly. The cultural adjustments being examined in this paper will focus on those connected to primordialism, that is, the attachments/relationships one acquires through enculturation or those adopted freely once familial ties are severed. All humans have relationships but they can vary in kinds. Primordialism allows variations of relationships. In fact, primordialism can be broken down into two contexts: the hard and the soft. Primordialism's hard context refers to a culture's emphasis on kinship that values familial ties and cherishes the loyalty that comes with these relationships. Here, the foundation of

a person's life is family, which shapes identity and leaves little room for any kind of independence or individualism. The soft context of primordialism shows less emphasis on family ties, and, instead, appreciates social ties that bind people based on common experience and circumstances. Moroccan immigrants in Spain make a relatively quick transition to the soft sense of primordialism due to separation from family and the encounter with opposing Spanish cultural traits. This paper demonstrates how Moroccans in their home environment characterize the hard sense of primordialism, while immigrants in Spain adopt the soft sense as a way of both blending in with the host culture and staying connected to other immigrants who embody the home culture.

Serratos, Kent, INVESTIGATING THE FACTORS OF CULTURAL DIVERSITY IN THE HOUSTON WORKPLACE, Dr. Ly Phan, Psychology

Today, people are asked to communicate and collaborate as a team to accomplish goals. With the effects of cultural differences and language barriers combined, it is easy to see how immigrants could experience socializing and interacting with fellow co-workers with higher level of difficulty. The present study examines different factors of cultural diversity in the workplace. I predicted that participants born in other countries will report a lower level of social interaction than participants who were born in the U.S. Secondly, I predicted that participants born in other countries will be more likely to feel that their culture/ethnicity affects their working environment compared to participants who were born in the U.S. Approximately 960 full-time employees will be invited to voluntarily participate in this study. Responses from 102 participants, of whom 43% were foreign-born, were used for the preliminary analyses. I found a significant difference between participants who were born in the U.S. and those born outside of the U.S. regarding their feelings toward interaction with others in their organization t(80) = 47.515, p < .0001, toward the difficulty minorities encounter when interacting with others t(80) = 19.889, p < .0001, and toward the effects of race/culture/ethnicity on experiences in the workplace t(79) = 23.028, p < .0001. Discussions of preliminary results and suggestions for future research were included.

Soto, Daniel UNDERSTANDING SOUTER: IDEOLOGY AND CONLFLICT WITH BUSH 41'S ADMINISTRATION, Prof. Charles Young, Political Science

Justice Souter, President Bush's 1990 "stealth candidate" to the Supreme Court was met with a skeptical eye from conservatives and liberals alike. His post Harvard career had been one dedicated primarily to teaching and counseling, not publishing. The absence of a paper trail recording his ideology left many wondering what this man would bring to a Court with conservatives such as Thomas, Scalia, and Rehnquist, and swing voters like O'Connor and Kennedy. His first few years on the bench made him out to be the conservative Republicans had hoped Reagan's Bork nominee might have been. Eventually, however, Souter would routinely cast his votes in an arguably liberal direction. It is the intent of this paper to offer explanation for Souter's voting pattern behavior throughout his judicial tenure, and explore his relationship with the President who appointed him. It is my intent to show that Souter rather than being a dove in hawk's clothing adheres to a doctrine that does not keep to one political side or another. There is a continuity to be found in his judicial ideology. This hypothesis will be scrutinized from a quantitative perspective via court cases examining key issues that mark the apparent shift Souter makes from conservative to liberal Justice, and identifying a consistency in his opinions and dissents, and from a qualitative standpoint via testimonials exploring what the other Justices, and the president who appointed him, thought of Souter's voting record and his judicial philosophy.

Srubar, Marijean, REMNANTS OF VALENTINIAN GNOSTICISM IN THE TWENTY-FIRST CENTURY Sr. Madeline Grace, Theology

The first and second centuries were a time of struggle for the True Church. Bombarded on all sides by one heresy after another, the Church began to articulate the doctrine which would shape her teaching for centuries to come. One such heresy which challenged the Church was that of Gnosticism. Although the schools of Gnosticism were numerous, this presentation will focus on the largest, most influential Gnostic school—the 'Christian Gnosticism' as taught by Valentinus in the second century. His teachings affected several generations of both Gnostic and Christian doctrinal development and thought. But where did this heresy come from? Who spread it, and what were its main teachings which challenged the True Church?

How did the Church combat these heretical claims? Although the Church did hold strong against the Gnostic heresy, traces of Valentinus' Gnostic ideas still cast a shadow on the world today, nearly two thousand years later. Where do we find remnants of this second century school of thought in the world today? This presentation includes a brief examination of the foundation, teaching and combat of the second century heresy of Valentinus and a look at the remnants of this heresy still around in the twenty-first century.

**Streeter, Mike, MILTON'S TWO MINDS: THE TELEOGY OF MILTON'S MATERIAL MONISM IN PARIDISE LOST, Dr. Clinton Brand, English

The basic argument of this paper is to demonstrate that Milton indoctrinated <u>Paradise Lost</u> with his theory of Creation *ex Deo* for two reasons, to prove a discursive point (i.e. theodicy) and also to write a good story (i.e. a sublime theodrama), however parodic it may be. I argue, as well, that these two purposes are bound together in an organic relationship, in which Milton's drama co-opts his discourse for rational support. My conclusion is that both of these aspects of <u>Paradise Lost</u> are equally important and that one cannot be privileged over the other.

Streeter, Mike, PILOTING THE POET: HOMERIC DICTATION IN TENNYSON'S CROSSING THE BAR, Dr. Shannon Forbes, English

The impetus from which I begin my argument is that the New Critical insights into the precise meaning of "the bar" are ambiguous and underfulfilling. The judgment that the vehicle of "the bar" translates into meaning death, while accurate, does not describe the tenor that the poet is trying to convey. I propose that the motif of "the bar" carries a more characteristic meaning of safety and hazard. I also argue that this implication is "piloted" or dictated by the Homeric topos of the sea meaning safety and hazard. I cite numerous parallels between Homer's Odyssey and Tennyson's "Crossing the Bar," and look specifically towards the episode of the Sirens in Homer's epic. I also try to sort through and reconcile the discrepancies between the two works and argue that because Tennyson is a Christian fideist, then he will only imitate Homer to a certain degree.

Stuck, Christopher, POLITICS AS SPECTACLE: THE HORSERACE PHENOMENON IN AMERICAN POLITICAL MEDIA COVERAGE, Dr. Jean-Philippe Faletta, Political Science

Much has been made recently about the decline of responsible news reporting and the lack of in depth coverage of important news events. Many are quick to point to a perceived political bias in the mainstream media for the decline in modern political news coverage. The truth is that there are several factors that have played a role in the decline of news reporting. This study utilizes academic research as well as media experts in order to illustrate the problems that exist within the media as a whole, and to examine whether there is an inherent political bias in news reporting.

Stuckey, Luke, MIXING BUSINESS AND PLEASURE: HOW SEX IN ADVERTISING EXPLOITS AND MISDIRECTS, Sr. Paula Jean Miller, Catholic Studies

Does sex sell? One woman exposes her body, someone else buys a product, and yet another cashes in. No logical connection exists between the exchange of body and money. . . so why does society deem it ethical that the two should be traded for one another in the business of advertising? The Latin root of advertise means to turn toward, but what are people being turned toward - the voluptuous beauty or the unrelated product? What constitutes false advertising for business ethics? Does sex really sell, or is this just a facade in pursuit of ill gotten profit?

Sullivan, Amy, ART COLLECTING AND PATRONAGE IN THE GILDED ERA, Dr. Bonario, Art History

Different aspects of several great art collections and art patronage of the gilded era are discussed. The newly industrialized nation at the turn of the century produced much of the wealth that fueled American

patronage. Henry Clay Frick and Andrew Mellon spent unsparingly in the cause of art patronage. Frick built his mansion in New York to house his collection, leaving an endowment to support a museum. Mellon is responsible for the National Gallery in Washington. Pierpont Morgan contributed to the Metropolitan Museum and the Hartford Atheneum. Isabella Stewart-Gardner collected many great masterpieces and left her collection intact as a museum. These patrons are discussed in relation to their individual personalities, collecting abilities, business reputations, and philanthropy. The unparalleled opportunity of this period to purchase many of the masterworks of European art was not only due to the newly industrialized economy of the United States, but also related to political developments taking place in Europe. European aristocrats were forced to sell their masterpieces because of political revolts and reforms. The English were selling off their ancestral portraits, and masterpieces bought during Grand Tour. The Italians, during post-unification, were selling off great Renaissance and Baroque masterpieces. The Russian government sold off great masterpieces, due to the revolution and bankruptcy that followed in 1920s and 1930s. Favorite advisors and dealers who negotiated these purchases, as well as laws that influenced American patronage are discussed in detail.

Tahvilian, Nadia, Al-Rehani, Nawaf; Chiali, Ilyas; Vasquez, Aracely, SECONDARY ENDOSYMBIONTS OF WHITEFLIES, Dr. Rosemarie Rosell, Biology

Bemisia tabaci whiteflies are important agricultural pests that affect both food and fiber plants. These insects contain a specialized organ called the bacteriome that houses bacterial endosymbionts. Some of these endosymbionts can be beneficial to the whitefly by synthesizing essential nutrients like amino acids, while others cause harmful effects such as interference with reproduction. Endosymbiosis is common throughout the arthropods and these relationships have been classified as primary or secondary. Previous studies have shown that the whitefly primary endosymbionts belong to the ?-proteobacteria. The objective of this project is to determine what types of secondary endosymbionts are present and to investigate the phylogenic relationship between these bacterial species. Genomic DNA was collected from a diverse group of whitefly species from a variety of locations throughout the world. Using polymerase chain reaction (PCR), bacterial DNA was specifically amplified from the genomic DNA with the use of rDNA primers based on the 16S rRNA of *E. coli*. These primers specifically target only the bacterial DNA of secondary endosymbionts that may be present. Once a PCR product was obtained, it was sequenced and the data was used to mine the Genbank database to determine the taxonomy of the endosymbiont. Future studies will focus on discovering the phylogenic relationship between whitefly and bacterial species.

To, Hsiang, Nguyen, Nam, Iglesias, Norma & Gonzalez, Sonia, GENDER DIFFERENCES IN COGNITIVE PERFORMANCE OF ALZHEIMER'S PATIENTS Dr. Carl Scott, , Psychology

Increasing numbers of researchers have examined the cognitive deficits in patients with Alzheimer's disease (AD). However, previous research has not examined gender differences in AD patients. Typically, researchers have compared AD patients against a control group of people who do not suffer from the disease. We examined existing research for sex differences in the performance among AD patients via meta-analysis. We noted the age of the subjects, and the type of cognitive performance measure used. Twelve published studies reported data on sex differences in AD patients. Results indicated that among AD patients, men outperformed women in four of five areas: global cognitive functioning, verbal ability, visual spatial skill, and episodic memory. Women outperformed men only in language function. The differences were small but consistent. Identifying small gender differences may improve diagnostic tests and therapies for AD patients that can be tailored differently for males or females. Future efforts should identify the cognitive treatments that were most successful with each gender. Both types of gender-relevant findings will help guide treatment and diagnosis of future AD patients.

Torres, Ana, CONCERING ART: ORDER, LOVE, AND THE IMAGINATION IN A MIDSUMMER NIGHT'S DREAM, Dr. Dr. Charles Krohn, English

The power of the audience is of utmost importance in William Shakespeare's study of art and the interpreter. What Shakespeare's audience participates in is the scattered minds of its characters evolving into a unified society. Diverse imaginations are synchronized in the fifth act because they produce an

onstage version of the theater experience, complete with its own audience, but the power of interpretation remains dispersed. This second stage and its auditors become crucial to an understanding of the previous acts and the underlying message of the play. Art is forever evolving if it remains subject to the imagination alone, without reference to its society's principles (the marriage motif becomes central to the understanding of the imagination's quest for unity). There must be an interpreter for a work of art for its completion; these auditors might disagree as to the play's merit, but this problem finds its origins in how the performers reflect the misinterpretation of its very auditors. With too many voices, art is hindered in its portrait of the universal. The imagination is unlimited, but art must impose its rules on the imagination in order to avoid the production of petty theater: Athens and the Woods form one world because they submit to the same high concerns. In plays, the artist and the audience strive for the unlimited, but to protect the theater and its audiences, art must have limits.

Trevino, Rebecca, THE RISE OF FASCISM IN SPAIN, Dr. Thomas Crow, History

The rise of Fascism in Spain was an escalating event that would lead to the Spanish Civil War of 1936-1937. It was described by many as the dress rehearsal to World War II. The fascist movement in Spain may not have been as notorious as the movements in Italy or Germany but was more than enough to modernize Spain and revolutionize the government that would ultimately change the way Spain was viewed by other countries. The elections of 1931, a major turning point in Spain's history in which the antimonarchists won a majority of votes; this led to a revolt and the exile of Spain's King Alfonso XIII. From this moment on the Spanish republic would be very unstable and the effects of Fascism will be forthcoming. After a coup in 1936, Franco's objective for coming to power was to restore the monarchy. He wanted to be seen as a caretaker for the monarchy but at the same time would not allow the exiled king back into the country until his death November 20, 1975 marking the end of Fascism in Spain and the return of the monarchy. The consequences that the Spanish citizens faced for revolting against the monarch left the country open to different regimes and leaders that had their own designs on what Spain should be, many people left Spain during the civil war and did not return for the main reason that Spain was now a fascist nation. This paper questions why the Spanish people accepted this government instead of the communist alternative and tracks the different fascist groups that formed in Spain along with their leaders while mainly focusing on Generalissimo Francisco Franco.

Tu, Linh, COMFORT WOMEN AND REPARATION, Dr. Hans Stockton, International Studies

The Japanese colonization period and World War II took place more than half a century ago, yet the victims of the "comfort system" which took place during that time have not received any form of reparation from the Japanese perpetrator of this heinous system. This study examines the current debate between those seeking and those denying reparation. What explains the continued failure of the comfort women claims? The theory presented in this paper is that heavily influential third parties are overlooking this human rights issue for the sake of political and/or economic interests. This study identifies and defines theories of reparation, reviews different tribunals and court cases regarding the comfort women issue, and reviews previous conventions defining inhumane acts. By comparing successful and failed reparation movements, this paper will identify the set of variables central to such outcomes and apply them to the comfort women case. The primary conclusions are that the involved governments' political and economic interests outweigh their desire to promote human rights and that until pressure from the international arena is enforced upon the Japanese government, the Japanese government sees no urgent need to address the issue at hand.

Vennekotter, Alexandra, THE EFFECTS OF RACE ON CAPITAL PUNISHMENT, Dr. John Burke, Political Science

Capital punishment has become quite a "hot" political topic within recent decades, especially in places like the United States where several states in the nation are executing more people than ever before. Among the seventy-four countries that still allow the death penalty to be used as punishment, the United States is one of the only democracies. A key issue in the current debate over capital punishment, especially in America, is whether the race of the major players in the court room might influence the harsher punishment. The paper will show a comparative study on capital punishment, and the way race

influences the penalty in America. Not only will the paper take a look at the race of the perpetrator, but the research will include studying the race of the victim and the jury selection, too. The paper will first look up a brief history on capital punishment, and a brief history on race in America. It will then focus on finding racial statistics for perpetrators, victims, and juries in cases that end with the perpetrator on death row. Then the paper will start looking at specific cases from America that will allow the author to look for similarities and differences within the processes. The author of the paper believes that America does have a racially prejudiced system. The author also predicts that the race of the victim could have more to do with the perpetrator receiving the death penalty than the race of the perpetrator.

von der Osten, Denise-Christine, THE EUROPEAN UNION AND TURKISH INTEGRATION: THE WEAKENING EFFECT, Dr. Linda Pett Conklin, International Studies

Turkey, an Islamic country straddled geographically on both the: European and Asian realms, has desperately tried to become a member of the European Union (EU) since 1963. Due to various cultural:differences and the failure to meet the criterion set forth for:membership by the Copenhagen European Council in 1993, Turkey has not:yet succeeded in its membership aspirations. Today, however, Turkey:has come closer than ever to attaining EU membership. As the country:makes rapid speed in fulfilling the Copenhagen Criteria, and as:Turkish-EU integration becomes more of a reality, the issues of:religion and culture, the economy, the country's immense size and:population, as well as the strain on the EU budget and job market:plagues the mind of Europeans. In reality, as many have frequently:argued in the past, the EU's hesitation in integrating Turkey is not:solely due to the differences in culture and religion, although they:play quite a significant role. Rather, as this paper intends to prove.:integrating Turkey into the European Union will have an initial;weakening effect on the EU's many sectors, from which the organization:may or may not recover as long as Turkey is given fullmembership:privileges. This assertion will be shown through an overview of the:organizational operation of the European Union and of the roots and origins of European and Turkish culture, as well as a careful analysis:of Turkey's economy, size and demography, social and cultural issues,:including topics of the past, such as Cyprus and various human rights: violations.

Weatherly, Katharine, ROMANTIC NOTIONS OF THE OLD SOUTH, Dr. Joseph McFadden, History

There is a romance to the Old South that continues to fascinate and intrigue even 150 years after the antebellum period. I assert that the notion of the Old South is rooted in Romanticism. If someone were to ask you to conjure up an image of the Old South, you would likely imagine very specific concepts, ideas and scenarios. When did these concepts, ideas and scenarios originate? Did these Romantic notions of the Old South exist in the antebellum period? I propose to discover whether these Romantic concepts, ideas and scenarios existed previous to the Civil War via primary source research into the Southern Literary Messenger. I will examine publications of the Messenger dating from 1845 to 1860 in order to determine whether the Romantic concepts, ideas and scenarios of the Old South existed previous to the Civil War.

White, Julie, ENTANGLED, Dr. James Barloon, English

This short story is about an ordinary young woman named Molly, who faces ordinary troubles, but extraordinary feelings. She is struggling to get past a breakup that has happened before, and wonders why she let it happen again. Deciding to accept that things could have never worked out, Molly vows to change. As soon as she makes plans, though, her ex walks back into her life. Determined to stick her ground, she is nevertheless throw upside down again by the myriad of emotions that sweep back through her. Culminating in a moment of truth, Molly must take control of her life and chose which path she truly wants to take. In this story I have attempted to create with words the confusing emotions Molly faces. I took a moment in life and explored the intricacies that make up that moment, focusing on what might seem ordinary, but is in actuality complex.

Wild, Shannon, MEDIEVAL PAGEANTS: A THEATRICAL RELIGIOUS EDUCATION, Sr. Paula Jean Miller, Catholic Studies

Cycle Plays or pageants demonstrate tenants of the Christian faith and the experiences ordinary people face in their daily lives, today as in the Middle Ages. By using the senses of sight, sound, smell, and touch, the medieval religious drama reveals to its audience that we are not so far removed from God's love nor wrath. Cycle Plays seek to reinforce the moral and spiritual development of people by letting them 'witness' the life and death of their Savior, while making them accountable for their own salvation. Every pageant in the cycle has the ability to become real and relevant. The religious drama has the power to transform us and enables us to transcend time and place.

Wilkins, Jeanette, MULTINATIONAL CORPORATIONS AND CORPORATE SOCIAL RESPONSIBILITY: A SUSTAINABLE RELATIONSHIP Dr. Gustavo Wensjoe, International Studies

In the mid-20th century, corporate executives embraced Milton Friedman's ultra-liberal maxim, the business of business is business, placing a convenient distance between business practices and social impact. However as multinational corporations become transnational entities, governments, non-governmental and inter-governmental organizations, shareholders and consumers question the relationship between business and society. It is this writer's intention to examine the development of corporate social responsibility programs, and to consider if those programs can be sustained on a global scale. This paper will examine the evolution of the corporate social responsibility movement, with an overview of well-known incidents that aroused critics and stimulated action by multinational corporations. It will review the role of national governments regarding trade incentives and regulation for multinationals, and initiatives by inter-governmental institutions and non-governmental organizations to create enforceable regulatory regimes. It will also examine corporate efforts to forestall hard law regimes in the adoption of codes of conduct or self-regulatory schemes. Last will be a review of recent business developments that suggest that corporate social responsibility programs have gained value in the construction of global business strategies. While inconclusive, this research suggests future shifting from stakeholder polarization to cooperation and compromise.

‡ Visiting Students from the University of St. Thomas, Fredricton, New Brunswick

*Houston UST students chosen to present their papers at The University of St. Thomas, New Brunswick, March 15, 2006