

Junior and Senior Courses

Rhetoric and Composition

"The Rhetoric of Survival"

Arts and Humanities"

"The Literature and Cinema of Revenge"

"Philosophy of Art"

"The Printed Page: Victorian to Virtual"

Social and Behavioral Sciences

"Public Space: Monuments and Memory"

Science and Math

"Methods of Applied Mathematics"

"Medicinal Chemistry"

"Future Dilemmas: Energy, Food, and Water"

Education

"Urban Education: College Studies"

Interdisciplinary

"Looking to the Future: The Everglades from Beginning to End?" (linguistics and biology)*

"Science and the Imagination" (English and mathematics)

The Rhetoric of Survival
Writing and Rhetoric Honors Seminar 300
Three Credits
Dr. Kate Kessler
James Madison University
The Honors Program
Dr. Maureen Shanahan, Director

Description

Rhetoric is the art of language use. In *The Rhetoric of Survival* we will examine language use in human-induced trauma. We will examine how language both reflects the intentions and shapes the perceptions of human predators, human victims, human resistance, human survivors, and human assistants. This seminar will accommodate 20 students. We will read, view, and discuss books, articles, and videos. We will listen to and interact with speakers. We will take a field trip. While I have chosen to use the Holocaust as the framework of *The Rhetoric of Survival*, we will examine multiple human-induced threats to human survival including cancer, domestic abuse, and war. You will have the opportunity through your creative project and research paper to explore other areas of interest.

Texts, required but not limited to:

Night by Elie Wiesel

Promiscuities by Naomi Wolf

Resistance During the Holocaust United States Holocaust Memorial Museum

The Genocidal Mentality by Robert Lifton and Eric Markusen

The Holocaust Chronicle. Publications International

Part 1: The Rhetoric of Predators

Week One:

“What does it mean to be a predator?”

“The Roots of Evil: Zealots, Monsters, and Tyrants” *Newsweek* handout

The Holocaust Chronicle “Roots of the Holocaust”

Week Two

The Genocidal Mentality “Confronting Nuclear Entrapment,” a sociological perspective of the rhetoric of predation

The Holocaust Chronicle: “The Nazi State Begins,” “Steps Toward Destruction,” and “Euthanasia and Operation T-4”

“Some Things Psychologists Think They Know about Aggression and Violence” by Clark McCauley, *HFG Review*, spring 2000, vol. 4, No. 1, pp. 39 - 44

Week Three

The Holocaust Chronicle “Machinery of Hatred” and “Mass Murder”
The Genocidal Mentality “Professionals”
Promiscuities “Introduction: First Person Sexual”
Recap: “What does it mean to be a predator?”

Part 2: The Rhetoric of Victims

Week Four

“What does it mean to be a victim?”
JMU’s Women’s Resource Center: a psychological perspective of the rhetoric of victims
Promiscuities “Cheap or Precious?” and “Adults”
The Holocaust Chronicle “The Final Solution”

Week Five

How predators see victims: stages of dehumanization
Elie Wiesel’s *Night*
Night and Fog video
The Genocidal Mentality “Victims”

Week Six

Smoke and Ashes *film and discussion*

Night discussion
Promiscuities “Activity into Passivity: Blanking Out”
Recap: “What does it mean to be a victim?”

Part 3: The Rhetoric of Survivors

Week Seven

“What does it mean to be a survivor?”
Domestic abuse: a domestic abuse survivor and a Catholic social worker present
Primo Levey *The Memory of the Offense* video
Primo Levey *Survival in Auschwitz* excerpts

Week Eight

Keanu Reeves narrates *Holocaust Survivors* documentary
The Holocaust Chronicle “The Pursuit of Justice,” an anthropological perspective of the rhetoric of survivors
Night discussion
Mark Strauss, an Auschwitz Survivor and artist, will speak with us

Week Nine

Eastern Mennonite University: Stress and Trauma Healing in Conflict Transformation
Howard Zehr from EMU presents “Restorative Justice”
Recap: “What does it mean to be a survivor?”

Part 4: The Rhetoric of Resistance

Week Ten

“What does it mean to resist?”

Resistance During the Holocaust

The Holocaust Chronicle “Death and Resistance” and “Desperate Act,” a physical perspective of the rhetoric of resistance

Promiscuities “The Technically White Dress”

Week Eleven

Escape from Sobibor video: A true story of successful resistance during the Holocaust

Thomas Blatt, who is Toivi in *Sobibor*, will visit us from Santa Barbara to discuss “Witness as a Form of Resistance”

Creative Project presentations

Week Twelve

Testimony from three cancer survivors: “Being Your Own Advocate in the Medicine”

Creative Project presentations

Recap: “What does it mean to resist?”

Week Thirteen

Trip to the United States Holocaust Memorial Museum

Part 5: The Rhetoric of Assistance

Week Fourteen

“What does it mean to assist?”

JMU’s Safe Zone presentation: “Assistance for the Smallest Minority: GLBTQ”

1-in-4 JMU Men’s Group: “Men helping Victims of Sexual Assault”

Creative Project presentations

Week Fifteen

Medical Training and Trauma: a medical perspective of the rhetoric of assistance

The Holocaust Chronicle “Liberation and Rebuilding” and “The Aftermath”

Recap: “What does it mean to assist?”

Course Conclusion: discussion of the five areas, how they interrelate, and how our understanding of the rhetoric of survival can inform us

Evaluation

The definition of a seminar is a small group of students engaged in intensive study and original research under the guidance of a professor. Thus, evaluation will come from preparation for class (30%), a research paper (30%), a creative project (20%), and a reflective journal (20%).

We will use the university grading scale:

A = 95 - 100

A- = 91 - 94

B+ = 87 - 90

B = 83 - 86

B- = 79 - 82

C+ = 75 - 78

C = 71 - 74

C- = 67 - 70

D = 63 - 66

Contact person: Kate Kessler, kesslekj@jmu.edu.

Junior and Senior Classes

The Literature and Cinema of Revenge

HON 493 (2D), EH 492 (2D) – 3 credit hours

Rusty Rushton

University of Alabama at Birmingham (UAB)

UAB Honors Program

Dr. Michael Sloane, Director

General Description

This course will explore the moral and aesthetic tenets of revenge passion as represented in Western literature and film. In addition to viewing such cinematic works as *The Godfather* and *Dead Man Walking*, we will be reading Greek and Renaissance drama, passages from *The Bible*, Romantic poetry and philosophy, and essays concerned with contemporary instances of revenge. We will be particularly interested in the historical shift from family- and clan-oriented societies to those based on national judicial systems, as well as in the emotional price we continue to pay in moving from the one type of satisfaction to the other.

Texts:

Shakespeare, *Hamlet*

Shakespeare, *The Merchant of Venice*

Aeschylus, *The Oresteia*

Euripides, *Medea*

Kyd, *The Spanish Tragedy* (or *Four Revenge Tragedies*, ed Katharine Maus)

Nietzsche, *The Birth of Tragedy & The Genealogy of Morals*

Freud, *Civilization and its Discontents*

Shelley, *The Cenci*

Pynchon, *The Crying of Lot 49*

Syllabus

Tue Jan 7 Introduction, handouts for discussion

Thu Jan 9 personal touches: students share their suppression, their wrath (2-page personal narratives due, to be noted w/ comments by me, but not graded)

Tue Jan 14 Shakespeare, *Hamlet* (Acts I – III)

Thu Jan 16 *Hamlet* (Acts IV - V)

Tue Jan 21 Vengeance & the Legal System (handouts, guest lawyer Richard Stockham)

Thu Jan 23 passages from *The (Judeo-Christian) Bible* (handout)

Mon Jan 27 showing of *The Godfather I*, 8:00 p.m. Honors House

Tue Jan 28 *The Godfather I* (film)

Thu Jan 30 Thomas Kyd, *The Spanish Tragedy*

Tue Feb 4 Aeschylus, *The Oresteia* (intro + Agamemnon)

Thu Feb 6 *The Oresteia* (*The Libation Bearers & The Eumenides*)

Mon Feb 10 showing of *The Godfather II*, 8:00 p.m. Honors House

Tue Feb 11 *The Godfather II* (film)

Thu Feb 13 Euripides, *Medea*

Tue Feb 18 Shakespeare, *The Merchant of Venice* (Acts I – III)

Thu Feb 20 *The Merchant of Venice* (Acts IV – V)

Fri Feb 21 **recitation** in my office of Portia’s speech on mercy (IV.i.181-89) or Shylock’s on being a Jew (III.i. ”He hath disgraced...humility? Revenge.”)

Mon Feb 24 showing of *Dead Man Walking*, 8:00 p.m. Honors House

Tue Feb 25 *Dead Man Walking* (film)

Thu Feb 27 Simon Weisenthal, from *The Murderers Among Us*; Gerry Spence, “O.J.: The Last Word”; Michael Ignatieff, “Digging Up the Dead” (on Council of Truth & Reconciliation in S.A.); M. L. King, “Letter from Birmingham Jail”

Fri Feb 28 **first essay** (5-7 pages) due in my office by end of day

Mar 4–Mar 13 **student-groups meet w/ me** in my office

Tue Mar 4 Nietzsche, *The Genealogy of Morals*: Preface & First Essay

Thu Mar 6 *The Genealogy of Morals*: Second Essay (1, 11, 12, 23)

Mon Mar 10 showing of *Betrayal*, 8:00 p.m. Honors House

Tue Mar 11 Harold Pinter, *Betrayal* (film)

Thu Mar 13 Michel Foucault, from *Discipline and Punish* (handout)

Fri Mar 14 **revisions** of first essay due in my office by end of day

Tue Mar 18 group presentations on modern political situations & issues*

Thu Mar 20 group presentations (cont’)

Fri Mar 21 **second recitation** of Portia’s or Shylock’s speech, my office

Tue Mar 25 Freud, *Civilization and its Discontents* (I – IV)

Thu Mar 27 *Civilization and its Discontents* (V – VIII)

Tue Apr 8 Poe, “The Cask of Amontillado” & “The Tell-Tale Heart”; Faulkner, “Barn Burning” (all handouts)

Thu Apr 10 No Class (2-page film review due in my office by end of day)

Tue Apr 15 Percy Bysshe Shelley, *The Cenci*

Thu Apr 17 Thomas Pynchon, *The Crying of Lot 49* (**reading quiz**)

Tue Apr 22 *The Crying of Lot 49* (cont’)

Thu Apr 24 Conclusion, wrap-up, **second essay** (10-12 pages) due by end of day

Thu May 1, 10:45 – 1:15 our **final exam**, here in the Honors House

*possible topics for group presentations include Rwanda, Bosnia, Israel/Palestine, South Africa, Gandhi, M. L. King, the prosecution of Nazi war criminals, the American legal system, America's "war on terrorism."

Grades:

20% first essay (5-7 page)

30% second essay (10-12)

20% final exam (essay style)

10% student group-presentations

5% 2-page film review

5% the two recitations of either Portia's or Shylock's speech

10% class participation (can't hurt, can help) & attendance (can't help, can hurt)

Contact person: Rusty Rushton, rushton@provost.uab.edu.

Philosophy of Art
HON 308/PHI 432 3 Credit Hours
Course Instructor: Laura Newhart (philosophy)
Eastern Kentucky University
Honors Program
Bonnie Gray, Director

Required Text:

Higgins, Kathleen. *Aesthetics in Perspective*. Belmont, CA:
Wadsworth Publishing, 1996.

General Description:

We will consider a number of questions of fundamental importance to aestheticians and philosophers of art such as “What is art?” “Are there objective standards for determining artistic value or is beauty in the eye of the beholder?” “What is the nature of creativity?” “What is/should be the relationship between art and morality and/or society?” We will be examining these questions from the specific perspectives of a number of major theories of art including mimetic theory, expression theory, formalism, and the institutional theory of art. We will conclude by considering possible answers to these questions in the future.

Text:

Higgins, Kathleen. *Aesthetics in Perspective*. Belmont, CA:
Wadsworth Publishing, 1996.

Syllabus:

Beginnings

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|---|------|--|
| M | 1/10 | Introduction to course |
| W | 1/12 | “What is Art?” pp. 63-67; “The Role of Theory in Aesthetics” pp. 75-81 |
| F | 1/14 | Hume, “Of the Standard of Taste” pp. 31-43 |
| M | 1/17 | No Class!! Martin Luther King, Jr. Day!! |
| W | 1/19 | Kant, “The Four Moments” pp. 44-53 |
| F | 1/21 | Bullough, “Psychical Distance” pp. 164-167; Dickie, “The Myth of the Aesthetic Attitude” pp. 172-179 |
| M | 1/24 | Plato, “Inspiration as Magnetism” pp. 278-281; Aristotle, “Constructing a Tragedy” pp. 282-283; Kant, “The Nature of Genius” pp. 284-286 |
| W | 1/26 | Rilke, pp. 293-294; Truitt, pp. 295-301; Middleton, pp. 302-310 |
| F | 1/28 | Experiencing Art Report #1 Due |

Art, Truth, and Reality (Mimetic Theory)

- | | | |
|---|------|---|
| M | 1/31 | Plato, “Art and Appearance” pp. 114-121 |
|---|------|---|

- W 2/2 Wilde, "The Decay of Lying" pp. 122-124
 F 2/4 Lyons, "Paleolithic Aesthetics" pp. 125-131
- M 2/7 Saito, "The Japanese Appreciation of Nature" pp. 140-147
 W 2/9 Cage, "Experimental Music" pp. 148-151
 F 2/11 **Experiencing Art Report #2 Due**

Should We Focus On Form (Formalism)

- M 2/14 "Should We Focus on Form?" pp. 318-320; Parker, "Aesthetic Form" pp.321-325
 W 2/16 Fry, "The Limits of Formal Analysis" pp. 326-328
 F 2/18 Hanslick, "On the Musically Beautiful" pp. 329-330;
 Levin, "Balanchine's Formalism" pp. 331-336
- M 2/21 **No Class!! Presidents' Day!**
 W 2/23 Eco, "Repetition and the Series" pp. 347-349; Miller, "Advertising-End of Story" pp. 350-357
 F 2/25 **Experiencing Art Report #3 Due**

Art as Expressing or Arousing Emotion (Expression Theory)

- M 2/28 "Art as Expressing or Arousing Emotion" pp. 359-361; Tolstoy, "What is Art?" pp. 362-364
 W 3/2 Bell, "Emotion in Response to Significant Form" pp. 365-367; Langer, "The Symbol of Feeling" pp. 369-370
 F 3/4 Collingwood, "Expressing Emotion" pp. 371-376; Hospers, "The Concept of Artistic Expression" pp. 377-385

M 3/7 through F 3/11 Spring Break!!! No Class!!!

- M 3/14 Novitz, "Fiction, Imagination, and Emotion" pp. 386-390;
 Davies, "Why Listen to Sad Music...?" pp. 391-396
 W 3/16 Kundera, "The Nature of Kitsch" pp. 397-398;
 Calinescu, "Kitsch and Hedonism" pp. 399-403
 F 3/18 **Experiencing Art Report #4 Due**
Distribution of First Short Paper Questions

The Institutional Theory of Art

- M 3/21 Danto, "The Artworld" pp. 68-74;
 Dickie, "Art as a Social Institution" pp. 82-87
 W 3/23 Binkley, "Piece: Contra Aesthetics" pp. 88-97
 F 3/25 **Experiencing Art Report #5 Due**
First Short Paper Due

Art and Ethics

- M 3/28 “Art and Ethics” pp. 181-183; Nehamas, “Plato and the Mass Media”
Bloom, “Music” pp. 190-194
- W 3/30 Harries, “The Ethical Significance of Modern Art” pp. 195-204
Fuentes, “Words Apart” pp. 205-207
- F 4/1 Gass, “Goodness Knows Nothing of Beauty” pp. 208-212
- M 4/4 Mundy, “The New Critics” pp.213-221;
Kuspit, “Art and the Moral Imperative” pp. 222-225
- W 4/6 Gourevitch, “Behold Now Behemoth” pp. 226-232
- F 4/8 **Experiencing Art Report #6 Due**

Art and Our Institutions (Art and Society)

- M 4/11 “Art and Our Institutions” pp. 235-236; Mattick, “Arts and the State”
pp. 237-241; Vance, “Misunderstanding Obscenity” 242-245
- W 4/13 Wolfe, “The Worship of Art” pp. 246-250
- F 4/15 Young, “Destroying Works of Art” pp. 251-258
- M 4/18 Stalker and Glymour, “The Malignant Object” pp. 259-264
- W 4/20 Danto, “The Vietnam Veterans Memorial” pp. 265-269
- F 4/22 **Experiencing Art Report #7 Due**
Distribution of Second Short Paper Questions

Challenges to the Tradition and Beyond the West

M 4/25 through F 4/29 Group Presentations

M 5/2 Final Exam Period! Second Short Paper Due

Grading Policies:

Your grade for the course will be determined by:

(1) 8 Experiencing Art Reports	40%
(2) 2 Short Papers (5-7 pages each)	30%
(3) Group Presentation	10%
(4) Funding the Arts Project	20%

(1) **Experiencing Art Reports:** Every other Friday will be devoted to applying the theoretical concepts of the past two weeks to specific works of art. You will identify a particular artwork and explain how it is an example of (or a challenge to) the theories we have studied in that time period. Or, as an alternative you can report on a current news item that is relevant to the weeks’ theoretical content. Your artworks can come from any source, i.e., your own, a friend’s, a museum, a gallery, popular culture, etc. Your report should be 1-2 pages double-spaced typed and should include a copy of the artwork. You will be expected to present at least **one** of these reports to the class. If you do not, 5 points will be deducted off of your total points for this assignment. Due dates for the Experiencing Art Reports can be found on the syllabus, and a sign

up sheet will be passed around to schedule the in-class presentations. Each Experiencing Art Report is worth 5 points for a total of 40% of your final grade.

(2) **2 Short Papers:** In each of the short papers you will answer a question distributed in class in a 5-7 page (1250 words) double spaced, typed essay. The questions are designed to challenge you to analyze, critique, and develop the relevant theories covered in class. The questions will be distributed a week before the papers are due. The first short paper will cover the material from the Beginnings section and the four theories of art. The second short paper will cover the material from the Art and Ethics, Art and our Institutions, and Challenges to the Tradition sections. It is due during the exam period. Each short paper is worth 15 points for a total of 30% of your final grade.

(3) **Group Presentation:** Toward the end of the semester we will consider a number of challenges to the theoretical perspective of traditional Western philosophy of art. These challenges take a variety of forms and come from a number of sources which can be found in Parts III and IV of Higgins' text and include racism and sexism in the arts, popular culture, and non-Western views of art. The class will divide into six groups of three to four people, and each group will be responsible for choosing an article in this section and presenting it to the class. Each presentation should include a summary of the article, a discussion of interesting points in the article, and examples of artworks which illustrate the points. Prior to the presentations, each group will be asked to submit a proposal for their presentation including the title of the article you'd like to present, how the article presents a challenge to traditional views, and the reasons your group has for wanting to present it. The group presentation is worth 10% of your final grade.

(4) **Funding the Arts Project:** Thanks to the generosity of the Honors Program, we have been given \$200 to contribute to a non-profit art organization in our area. In order to do this we must complete a number of tasks including identifying regional non-profit art organizations; interviewing, visiting, and inviting in-class presentations by these non-profit organizations, issuing and evaluating Requests for Proposals, and engaging in a deliberative group decision-making process to select successful applicants and award the \$200. We will be breaking into small work groups to accomplish these tasks, and each of you will be expected to be actively involved in this project. You will also hand in two sets of Reflective Journal Essay Questions concerning your involvement in this project. One will be due before undertaking the project. The other will be due after the project is completed. Your participation in the Funding the Arts Project is worth 20% of your final grade.

Contact person: Laura Newhart, Laura.Newhart@EKU.EDU.

The Printed Page: Victorian to Virtual
English 398 (Honors), 3 Credit Hours
Jane A. Carlin, Senior Librarian, Design, Art, Architecture, and Planning
Barbara Wenner, Associate Professor of English
Honors Program
University of Cincinnati
Philip Way, Director

General Description:

“The Printed Page: Victorian to Virtual” explores the interactions between text and image focusing on significant British literary works, text, illustration, and production. The course also examines book design and binding up to the present, observing the ways in which the Internet has made many texts—and their repositories—virtually available. As part of the course, students observe how designs are used today and why authors and designers might choose a particular format and design to express the creator’s purpose. This class is limited to fifteen students. Instructors avoid the lecture (sage-on-the-stage) mode of presentation for the most part. Students participate actively in the class by presenting research on book design and bringing to class the problems which writers, illustrators, and book designers experience when producing a book. Instructors may provide mini-lectures, but students are expected to work on collaborative activities and share insights with classmates through group discussion and presentation. Several guest speakers and visits are scheduled.

Learning Objectives:

- **To explore book design and production in the 19th and 20th centuries, with special emphasis on artistic and literary traditions of Great Britain.**
- **To acquire skills in use of archives and examination of original documents.**
- **To acquire awareness of major cultural institutions in Great Britain.**
- **To increase knowledge and ability to present information in creative ways.**
- **To learn essential research skills and utilization of technology.**
- **To introduce the basic elements of book design and construction.**
- **To gain knowledge of important Victorian fictional texts and to evaluate literature in a cultural context.**

Texts:

This is a selected list of texts from which the instructors chose selections for students to study. These texts are supplemented by a variety of scholarly articles and review of relevant web sites, such as the British Library, the Victoria and Albert Museum, and the William Morris Society.

Altick, Richard.

Victorian People and Ideas: A Companion for the Modern Reader of Victorian Literature.
New York: Norton, 1973.

Armstrong, Carol M. *Scenes in a Library: Reading the Photograph in the Book, 1843-1875.*
Cambridge, MA: MIT Press, 1998.

Bartram, Alan. *Making Books: Design in British Publishing since 1945.*
London: British Library; New Castle, DE: Oak Knoll Press, 1999.

Bettley, James, ed.*The Art of the Book: From Medieval Manuscript to Graphic Novel.*
London: V&A Publications, 2001.

Brake, Laurel. *Print in Transition, 1850-1910: Studies in Media and Book History.*
Houndmills, Basingstoke, Hampshire; New York: Palgrave, 2001.

Christ, Carol and John Jordan, eds.*Literature and the Victorian Imagination.*
Berkeley: University of California Press, 1995.

Curtis, Gerard. *Visual Words: Art and the Material Book in Victorian England.*
Aldershot, Hants, U.K.; Burlington, VT: Ashgate, 2002.

Darton, F. J. Harvey.*Children's Books in England: Five Centuries of Social Life.*
London: British Library; New Castle: Oak Knoll Press, 1999.

Davis, Philip. *The Oxford English Literary History, Vol. 8: Victorians 1830-1880.* New York:
Oxford University Press, 2002.

Maxwell, Richard, ed. *The Victorian Illustrated Book.* Charlottesville: University Press of
Virginia, 2002.

Meggs, Philip B. *A History of Graphic Design.* New York: John Wiley & Sons, 1998.

Palmer, Rodney, and Thomas Frangenberg, eds.*The Rise of the Image: Essays on the
History of the Illustrated Art Book.* Aldershot, Hants, U.K.; Burlington, VT: Ashgate, 2003.

Syllabus:

Week One:

An introduction to the course, formation of student learning groups and introductory group exercise, introduction to the history of the book and Victorian literature, Discussion of literary and visual arts research.

Week Two:

An evening at the Archives: Utilizing the “history of book” teaching collection of the University’s Archives and Rare Books Department; you will be introduced to a brief history of book design, and a hands on viewing and discussion of various types of books and documents (including Illumination and the Decorated Page). Student groups will meet to select research topics.

Week Three:

An evening at the Cincinnati Public Library. We will be meeting with Sylvia Metzinger, Rare Book Librarian, who will focus on the William Morris collection as well British illustrators of the 19th century.

Week Four:

Introduction to the literature and the art of Christina and Gabriel Rossetti and Thackeray, Dickens and their illustrators. Discussion of color printing and design, which prompted the production of, illustrated book in the latter part of the 19th century. Works such as Owen Jones's *The Grammar of Ornament* and the many publications of William Morris and Kelmscott Press will be discussed as well as Aubrey Beardsley's *Yellow Book* and his illustrations of the literature of Wilde and Pope.

Week Five:

Visit to local press: Patsfall Press and continued discussion on printing history and formats, particularly Leonard and Virginia Woolf's Hogarth Press, noting the emphasis on the physical form of the book, its cover, and book jacket, as well as the binding and typesetting.

Week Six:

Group Presentations: guest critics will be invited
Individual project descriptions are due.

Week Seven:

DAAP professors Jane Alden Stevens and Kimberly Burleigh visit and discuss their own contemporary book art. Orientation to study trip and introduction to Britain.

Week Eight:

Take home examinations – must be completed and submitted by March 2nd

The Tour:

March 18 (Friday) leave Cincinnati

March 19 (Saturday) arrive in London, V&A exhibit – International Arts & Crafts, welcome dinner and orientation to London

March 20 (Sunday) tour of London, Tate Museums

March 21 (Monday) National Art Library – V&A, St. Bride's Printing Library

March 22 (Tuesday) Kelmscott House. Evening at the theater

March 23 (Wednesday) visit to Oxford and Woodstock

March 24 (Thursday) British Library and farewell dinner

March 25 (Friday) travel back to Cincinnati

The class will meet April 17th (Sunday) to present their books at DAAP Library. These books will be on exhibit for a three-week period.

Grading Policies:

Students are evaluated by successful completion of the following:

A group project utilizing problem-based learning, which involves an analysis of printed materials for presentation in class (40%): This project provides students with the opportunity to fully explore a subject related to course content. As a group, students identify a topic that they thoroughly examine throughout the quarter from a list of research topics that has been compiled and available on the Assignments section of our class Blackboard site. They may use these topics or develop one of their own. Each topic needs instructors' approval.

As a group, students investigate the topic, and the end result is a 20-minute presentation to the class. As they research a topic, it is important to keep in mind that they must approach the topic from many different perspectives. The goal is to provide information not only on, for example, the author and content of a book but the cultural context in which the book was produced, the readership of the book, the impact of the content on society, and other social, cultural, artistic and economic factors. .

An individual project resulting in the construction of a book (40%): General Description: For the final project, students are expected to create a "book" that will draw inspiration from the many examples we have seen in class as well as reflect aspects of the trip to England. They must select an "inspiration" publication/topic for the basis of the book, for example, the publications of William Morris, the unique illustrations of Aubrey Beardsley, or the development of typography and fonts. Students are required to submit a written reflection about the book that includes the following information:

- How they utilized the concepts and themes discussed in class.
- How they integrated their experiences in England into creating the book.
- How they used specific images, text, and materials to convey their ideas.

- How they presented their project as thoughtful, well-organized, well-documented, pleasing for an audience.

A take-home examination where students apply their newfound knowledge of textual interpretation and visual concepts to a new book. (20%)

Contact person: Barbara Wenner, WENNERB@ucmail.uc.edu

PUBLIC SPACE: MONUMENTS AND MEMORY
University Honors Program, UHON 402-001 (senior level), 3 credits
Dr. Troy R. Lovata and Elizabeth Mickey, Undergraduate Co-Teacher
University of New Mexico, University Honors Program
Dr. Rosalie Otero, Program Directory

Description

This course examines the public made physical. People across the world and time have marked significant events with public displays. Monuments serve as both divisive focal points for political debates as well as vivid connections to history. Students explore: why we commemorate certain events while ignoring others; the role of public art in public memory; the process of developing monuments; the political debates surrounding monuments from other eras; and the ways in which monuments change meaning, are defaced and even destroyed. Students take multiple tours and attend meetings of the Albuquerque Arts Board to see how work is funded, sought, and chosen.

(As with all University of New Mexico Honors Program courses, registration is capped at 16 students).

Texts

Students use an Honors program produced reader (individual readings discussed below) and Kenneth Foote's book *Shadowed Ground: America's Landscapes of Violence and Tragedy* (2003).

Schedule

Week 1: January 18

Introduction to class policies, procedures and assignments

In-class sketching exercise to introduce sketching as a reflexive process of understanding the built environment

Read: excerpts from *Pencil Sketching* and *Sketching with Markers* by Thomas Wang (2001, 1981)

Week 2: January 25

Memorials Around Campus

Tour: UNM West Campus (alumni building, class benches, the Alumni Chapel, Scholes Hall mural, Zimmerman Library murals)

Read: 'Monuments' by Robert Musil (from his book *Selected Writings*, 1982) and Cornelius Holtorf's 'Megaliths, Monumentality and Memory' (from the *Archaeological Review of Cambridge*, vol. 14, no. 2, 1997)

Week 3: February 1

Public Art Around Campus

Tour: UNM public art by Luis Jimenez, Bob Hazous, Bruce Nauman, Dennis Oppenheim,

Beverly Sabo and John Christensen

Read: 'The Gigantic' (by Susan Stewart, from *On Longing*, 1993) and excerpts from *Spirit Poles and Flying Pigs: Public Art and Cultural Democracy in American Communities* (by Erika Doss, 1995)

Week 4: February 8

Cemeteries: Marking Time and Remembering the Past

Tour: Fairview Cemetery

Read: 'The Cemetery and the Living' from *Soul in Stone: Cemetery Art from America's Heartland* by John Gary Brown (1994)

*Assignment 1 due (sketch books and journals based on campus art tours)

Week 5: February 15

Cemeteries cont'd

Tour: Sunset Gardens Cemetery and monument workshop

Read: Kelke's *Churchyard Manual, with designs for churchyard memorials* (1851)

Week 6: February 22

Introduction to War Memorials and Landscapes of Violence

Film: excerpt from *Gordon Church: A Life in Art* (2004)

Read: Chapters 1-5 of Foote's *Shadowed Ground*

*Assignment 2 due (sketches of gravestones and markers, 2 page essay on cemeteries as endangered places)

Week 7: March 1

War Memorials and Landscapes of Violence cont'd

Tour: Bataan Memorial Park, Albuquerque Veteran's Memorial Park

Read: Chapters 6-9 of Foote's *Shadowed Ground*

Week 8: March 8

In-class, student led discussions of War Memorials and Landscapes of Violence

*Part 1 of Assignment 3 due (sketches and plan maps of memorial parks)

Week 9: March 15

Spring Break: No class

Week 10: March 22

Introduction to Public Art and Design Controversy

Film: *Maya Lin: A Strong Clear Vision* (1994)

Read: Louis Menard's 'The Reluctant Memorialist' (*The New Yorker*, July 8, 2002) and 'The Art of Honoring the Dead' (*Newsweek*, Sept. 9, 2002)

*Part 2 of Assignment 3 due (essay on heroics, violence and memory)

Week 11: March 29

In-class discussion of Design Controversies in Public Art

Read: 'The Persistence of Controversy: Patronage and Politics (from Harriet Seine's *Contemporary Public Sculpture*, 1992)

*Assignment 4 due (presentation of mock memorial designs based on the Maya Lin model)

Week 12: April 5

Albuquerque's Controversial Monuments and Art

Discussion of How Public Art is Chosen and Funded

Tour: Albuquerque Public Art (sculpture and murals) by Francisco LeFebre, Emmanuel Martinez, Norman Pacheco, Luis Jimenez, Buck McCain and Barbara Grygutis

Read: *The City of Albuquerque Ordinance for Art in Public Places* and selections from Sanford Levinson's *Written in Stone: Public Monuments in Changing Societies* (1998)

Week 13: April 12

Monuments to Greed and Consumerism

Tour: Adam Horowitz's sculpture landscape *Stonefridge* in Santa Fe

Read: J.M. Barol's *Monument to Process* (2005)

*Assignment 5 due (essay on public art controversies)

Week 14: April 19

Introduce Design Competition Final Project (collaborative, student produced designs for a modern monument based a comprehensive view of their studies throughout the semester)

Read: excerpts from Kay Wagenknecht-Harte's *Site+Sculpture: The Collaborative Design Process* (1989) and The Harwood Art Center/New Mexico Art's *Public Art Workshop Handbook: Designs to Provide Artists with the Sources, Skills and Knowledge to Conceptualize Public Art Commissions* (2000)

Week 15: April 26

Design Competition In-class Discussion and Group Work Day

Week 16: May 3

Last Day of Class

Presentation of Final Projects to a Public Audience and a Mock Selection Committee

Grading

Grades are based on a 1000 point scale with 10 points equaling 1% of the final grade (an "A" is earned at 90% or 900 points). Students will be sketching and taking notes during tours and working out possible designs for the final project in a sketchbook/portfolio, which will be graded separately from other assignments. This is a social science, not an art studio, course and your sketchbooks will be evaluated on the quality of thought, not your skill at drawing. A portion of

the class participation grade is based on out of class attendance of a monthly meeting of the City of Albuquerque's Public Arts Board.

Grades are determined as follows:

Attendance/Class Participation in Seminar Discussions....100 points

Portfolio Notes and Sketches...150 points

Assignments...500 points (5 @ 100 points each)

Final Project (Monument Design Competition)....150 points

Contact person: lovata@unm.edu.

**Methods of Applied Mathematics – Honors:
New Jersey Institute of Technology**

Albert Dorman Honors College

David Reibstein, Dean

*Mathematics 450-H01 (senior),
3 credit hours*

*Mathematics 451-H02 (senior),
3 credit hours*

Fall 2005

Spring 2006

Prof. Bruce Bukiet

Prof. Roy Goodman

Overview: In this course, students perform and analyze physical experiments in the context of an advanced mathematics course. This capstone course integrates the students' experience with mathematical modeling, mathematical analysis, numerical methods, computation, engineering and communication. In the first semester, students have short modules (2-4 weeks) that include relatively simple experiments and numerical simulations. This prepares students for the second semester, when students work in teams to perform and analyze experiments of greater complexity using more advanced mathematical skills. At the end of the second semester, students present their research results both orally and in writing.

Fall Semester

Textbooks: Haberman, **Mathematical Models: Mechanical Vibrations, Population Dynamics and Traffic Flow**, and Farlow, **Partial Differential Equations for Scientists and Engineers**

Experimental Apparatus: Vernier LabPro – Data acquisition and analysis software, Accelerometer, Photogates, Temperature probe, Masses, Springs, Pendulum, Cycloid track, Power supply, voltmeter, conductive paper and pens

Course Syllabus:

Unit I: Introduction - Math Modeling, Gravity and Newton's Law of Cooling

Week 1: Review of Differential Equations, Introduction to Mathematical Modeling and Applied Problems

Physical Experiment 1: Newton's Law of Cooling - is the power really 1?

Week 2: Equilibrium and Stability in one dimension (1st order), Newton's Law of Cooling
Review vector calculus, Newton's laws, conservative systems

Week 3: Least squares fitting for realistic data

Project 1: Mathematical modeling and Newton's Law of Cooling experiment analysis

Unit II: Mechanics I - The Brachistochrone

Week 4: Calculus of Variations

Week 5: Derivation of the Nonlinear Differential Equation governing the Brachistochrone
(Curve for which a ball travels from one point to another in the fastest time under the

influence only of gravity), Solution to the Nonlinear Ordinary Differential Equation (Parametric Equations)

Physical Experiment 2: Timing a trajectory: the Brachistochrone vs. the line

Week 6: Tautochrone property of the Solution, Analysis for the line and of the cycloid for different height/length ratios

Project 2: Calculus of variations, Brachistochrone experiment and analysis of the cycloid

Week 7: Review and Midterm and Going over Midterm

Unit III: Mechanics II - Mass-Spring Systems

Week 8: Review Midterm, Second order ODEs and harmonic motion, Dimensional Analysis

Week 9: Derivation and solution of undamped and damped single mass-spring systems

Physical Experiment 3: Single vertical mass-spring setup

Week 10: Phase plane analysis, Double mass-spring system, Non-linear oscillations and the Pendulum

Project 3: Measuring the spring constant, frequency and evaluating linearity of a spring and other mass-spring analysis

Week 11: Linear Stability and Linearization (higher order), Energy Conservation and Energy Curves, Numerical Methods for ODEs

Physical Experiment 4: Double mass-spring and its frequencies

Project 4: Double mass-spring and its frequencies; how initial conditions influence the dynamics of the double mass-spring; nonlinear springs

Week 12: Phase curves for the damped pendulum, The Spring Pendulum

Project + Physical Experiment 5: Timing the pendulum, analysis of the nonlinear pendulum and linearized pendulum equations

Unit IV: Electrostatics and Incompressible Fluids

Week 13: Derivation of Laplace equation for potential flow, Electrostatic potential, Properties of the Laplace equation, Elliptic PDEs

Week 14: Separation of Variables, Solutions in Rectangular and Cylindrically symmetric regions

Week 15: Finite difference methods, Review

Physical Experiment 6: Electrostatic Field Mapper experiment

Project 6: Analytic and Experimental Solution of Laplace's equation for electrostatics problems (equipotential and flux lines)

Grading Policy: The final grade in this course will be determined as follows:

Homework/Projects: 66% Midterm and Final Exams: 34%

Spring Semester

In the spring semester, we will learn more advanced methods from classical mechanics and use them to study problems that have attracted more recent interest: dynamical bias in coin tosses, as shown by Diaconis et al., chaos in the double pendulum, and the dynamics of simple walking toys.

Text: H.C. Corben and Philip Stehle, **Classical Mechanics XYZ and** expository articles: Keller, "The Probability of Heads," Amer. Math. Mo., (93) 1986; Diaconis, Holmes,

Montgomery, “Dynamical Bias in the Coin Toss,” preprint, 2004, Halir & Flusser, “Numerically stable direct least squares fitting of ellipses,” Proc 6th Intl. Conf. in Central Eur. On Computer Graphics, 1998, papers by McGeer, and the Ruina lab on walking toys

Experimental apparatus: Matlab image processing toolbox, digital camera, high-speed video camera & software, gyroscopes, coins, plates, and pendula

Course Syllabus

Unit I: Rigid body mechanics

Week 1: Course overview, introduction to Matlab’s image processing toolbox, Keller’s “no dynamics” coin-toss model

Project 1: Use Matlab image processing software to track object in video

Week 2: Review vector calculus, Newton’s laws, conservative systems

Week 3: The gravitational potential, review of variational methods, Hamilton’s principal and derivation of equations of motion as Euler-Lagrange equations

Project 2: Extend project 1 to calculate gravitational acceleration from a video of a bouncing ball

Week 4: Conservation laws and symmetry, rigid rotations in two dimensions, moments of inertia, parallel axis theorem

Week 5: Rigid rotation in 3D, parallel axis theorem, body frame & fixed frame, rotational kinetic energy & the inertia tensor, angular momentum. More image processing, least squares fitting & specialized methods for fitting ellipses

Project 3a: Feynman’s plate experiment part I: shoot and analyze video of thrown dinner plate, detect edges and fit to ellipses



Figure 1: Video capture from plate experiment and reconstruction of its position

Week 6: Euler’s equations, the rotator, the symmetric free top, Feynman’s plate experiment, geometry of three-dimensional reconstruction of plate from image

Project 3b: Feynman plate II: reconstruct plate positions, verify analytic prediction

Week 7: The asymmetric free top, stability of motion about axes, the Poincaré sphere

Project 3c: Experimental verification of stability and instability

Week 8: Moving between fixed and body frame, the body cone & space cone, the Diaconis et al. result

Begin big project A: Shoot and analyze several high-speed videos of coin tosses to verify the Diaconis result and get a probability distribution of biases

Week 9: parallel axis theorem for inertia tensors, the “heavy top” (gyroscope)

Project 4: The gyroscope

Unit II: Pendulums and nonlinear oscillators

Week 10: Forced damped linear and nonlinear oscillators, Poincare maps, chaos

Project 5: Forced damped linear and nonlinear oscillators

Week 11: Stabilization of the inverted pendulum by rapid oscillation of support (with demonstration!)

Week 12: The double pendulum, Lyapunov exponents

Project 6: Numerical and experimental demonstration of chaos using Lyapunov exponents

Week 13 & 14: Modeling and experiments with a simple walking toy, reference to Ruina lab



Week 15: Practice project presentations

Grading Policy: The final grade in this course will be determined as follows:

Homework exercises: 25% Projects and Presentations: 75%

Contact person: David Reibstein, reibstei@ADM.NJIT.EDU.

Medicinal Chemistry
CH 490 – 3 credit hours
Course Instructor: David C. Forbes (chemistry)
University of South Alabama
University Honors Program
Robert Coleman, Director

General Description:

The Special Topics Honors Seminar in Medicinal Chemistry will explore the role of organic chemistry in the design and action of drugs. Concepts presented in the two-semester organic chemistry sequence will be applied in discussing principles of drug discovery, drug development, drug/receptor interactions and structure/activity relationships. Aspects of biochemistry and physical organic chemistry will be covered as necessary to understand the chemistry of drug action and metabolism in the body. Examples from the major classes of drugs will be used to facilitate discussion and examine the role of medicinal chemistry as witnessed today.

Text:

Foye, William, Lemke, Thomas, and Williams, David. *Principles of Medicinal Chemistry*. Philadelphia: Lippincott Williams & Wilkins, 1995.

Syllabus:

- Week 1 *Introduction to Medicinal Chemistry* (Chapters 1 & 2)
- Week 2 *Biopharmaceutical Properties of Drug Substances* (Chapter 3)
- Week 3 *Pharmacologic Activity* (Chapter 4)
- Week 4 *Drug Design* (Chapters 5 & 6)
- Week 5 *Drug/Receptor Interactions* (Chapter 7)
- Week 6 *Drug Resistance and Metabolism* (Chapter 8)
- Week 7 *Metal-Based Drugs* – Guest Lecture by Prof. James Davis (Department of Chemistry)
- Week 8 *Computer Aided Drug Design* – Guest Lecture by Prof. Andrzej Wierzbicki (Dept. of Chemistry)
- Week 9 *Student Presentations (Groups A and C) and Discussions (Lead Discussion Group, Groups F and B)*

- Week 10 *Student Presentations (Groups B and D) and Discussions (Lead Discussion Group, Groups E and A)*
- Week 11 *Student Presentations (Groups C and E) and Discussions (Lead Discussion Group, Groups D and F)*
- Week 12 *Student Presentations (Groups D and F) and Discussions (Lead Discussion Group, Groups C and E)*
- Week 13 *Student Presentations (Groups E and A) and Discussions (Lead Discussion Group, Groups B and D)*
- Week 14 *Student Presentations (Groups F and B) and Discussions (Lead Discussion Group, Groups A and C)*

Grading:

The goals of this course are to understand the relationships between the biological, chemical and physical properties of medicinal compounds. This program will rely heavily upon the participation of all individuals. Accordingly, the course is structured so that all participants will present, discuss and critique a host of topics within the realm of medicinal chemistry. Group discussions will develop both written and verbal communication skills. Written critiques will assist in developing the skills of critical analysis. The instructor's role will be to introduce the concepts of medicinal chemistry and serve as a general moderator. The course will attempt to probe, communicate and critically evaluate issues of high medicinal relevance through a peer-reviewed format.

The final grade will be based upon the following grading scheme:

Class Participation	10%		100 pts
Presentations (2)	60%	2 x 30%	600 pts
Lead Discussions (2)	10%	2 x 5%	100 pts
Written Critiques (10)	20%	10 x 2%	200 pts
TOTAL	100%		1000 pts

The course grade will be based upon your performance in class and consist of the accumulated total points that you have achieved. The final grade will be determined in the following manner: A - 100-90%; B - 89-80%; C - 79-70%; D - 69 - 60%; F 59% and below. In special circumstances minor revisions to lower cutoffs may be made. In the event an error has been made during the grading of any scheduled assignment, you must report the error within two weeks of the scheduled assignment. No changes will be made after this time.

Topics to be presented must be approved by the instructor. Topic selection will be based upon a first-come-first-serve basis. Duplication of topics will not be permitted. Groups will be assigned within the first week of classes. Groups will consist of 2-4 students and be based upon the

course enrollment. Presentations must be in Power Point and available to the class one week prior to the presentation date. (NOTE: All due dates refer to when we meet as a group as described by the Schedule of Classes.) Use of the board, overhead and handouts, as aids, will be permitted. Lead discussion groups must have all relevant materials two weeks prior to the presentation date. Written critiques will be due one week after the presentation date.

A. *Presentations* are to be formal and professional. Plan on a thirty (30) minute presentation (30-50 slides) of the topic your group has selected. All group members must contribute in both the preparation and actual presentation of the topic selected. It is important to understand that a *complete* presentation of the topic must be done, that is, groups must provide sufficient background, significance and importance, historical relevance, lead compounds discovered, source of commercial compounds currently on the market and to comment on where the topic stands today. Each group will present two topics.

B. *Lead Discussions* are to be led by the designated discussion group. All those enrolled are required to participate; however, to maintain continuity throughout the presentation, we will have designated discussion groups. The purpose of a discussion group is to stimulate and direct the class discussion of the topic selected. Each discussion group will have all cited material two weeks prior to the presentation date and thus acquire knowledge of the topic selection prior to the presentation date.

Written Critiques are to be typed and no longer than one page. All those enrolled, aside from those presenting, are to complete a written critique on each presentation. Thus, a total of ten (10) critiques are to be completed. The purpose of the written critiques is to critically review both the materials presented and the primary literature cited. Critiques from designated discussion groups will be unique due to the format of the course. That is, discussion groups will have acquired an increased level of knowledge prior to the presentation and thus their critiques should be more detailed. The critiques should evaluate issues of clarity, organization and level of understanding. The reviews will not be antagonistic but constructive. Written critiques will be duplicated and furnished to those presenting.

Future Dilemmas: Energy, Food & Water
IDIS 491 – 3 credit hours
Course Instructor: Robert Doyle (physics & engineering)
Frostburg State University
University Honors Program
Maureen Connelly, Director

General Description:

Our human civilization's prospects are rather troubled. We are rapidly using up easily extracted fossil fuels, the legacy of hundreds of millions of years of buried plant and animal matter. Each year, fossil fuel combustion puts increasing amounts of carbon dioxide into the atmosphere, beyond the capacity of our plants and oceans to absorb it. The shift to renewable energy sources is achingly slow, particularly in industrial countries that use much more energy per capita than the developing world. Considering the sluggish pace of change, what are the likely energy sources in the mid-21st century? Since our steady supply of food relies on large amounts of fossil fuels for growing and transporting food, what foods will be available when energy costs are much higher? With increasing human populations across the globe, how will the available supplies of fresh water be stretched, particularly in developing countries with poor-quality water and rapid population growth. "Future Dilemmas" will use two texts, "The Party Is Over" by Richard Heinberg and "Plan B: 2.0" by Lester R. Brown. The first text outlines the central laws of energy, our history of energy extraction and likely scenarios of the future if our energy sources are not altered. "Plan B: 2.0" by Brown outlines strategies that will take our society towards sustainable living in regard to energy, food and water.

Texts: Richard Heinberg. 2005. *The Party Is Over: Oil, War and the Fate of Industrial Societies*. New Society Books.
Lester R. Brown. 2006. *Plan B 2.0: Rescuing a Planet Under Stress and a Civilization in Trouble*. Norton.

Syllabus:

- Class I –** Course Opening - Planetarium Presentation: "Report on Planet Earth," Class Discussion
For next class, read "Introduction," *The Party Is Over*; go over discussion questions
- Class II –** Student Questionnaire; Watch "*The End of Suburbia*" documentary, featuring Heinberg and others; Class Discussion on documentary and *The Party Is Over* "Introduction"
For next 2 classes, read *The Party is Over* Chapter One ("Energy, Nature & Society")
Prepare for next 2 classes by preparing answers to discussion questions
- Class III –** Thermodynamic Basics; Life forms in terms of mobility, energy sources; Ecology essentials including 1/10, carrying capacity, cycles, types of species
Discussion Questions followed by group discussion and group presentations

- Class IV** – Ways that humans have expanded their carrying capacity: takeover, tools, specialization, drawdown, complexity, and collapse; Factors leading to success of American society
Discussion Questions, followed by group discussion/presentations
For next 2 classes, read *The Party is Over* Ch.2 ("Agriculture & Fossil Fuel Eras")
Prepare for next 2 classes by preparing answers to discussion questions
- Class V** – Agricultural Era; Coal; Electrification; The Two Phases of Petroleum; Energy in Warfare; Transformation and Agriculture; Discussion Questions & Group Presentations
- Class VI** – The Oil Era – Part One 1950-1980; Part Two 1980 to 9/11/01
Discussion Questions followed by group discussion and group presentations
For next class, read *The Party is Over* Ch. 3 ("Lights Out – Hubbert & Peak Oil")
Prepare for next class by preparing answers to discussion questions
- Class VII** – 9/11; Iraq War and outcome; M. King Hubbert; Predictions for peak oil; Hubbert insights extended; Cornucopians and other naysayers
Discussion Questions followed by group discussion and group presentations
For next class, read *The Party is Over* Ch. 4 ("Non-Petroleum Energy Sources")
Prepare for next 2 classes by preparing answers to discussion questions
- Class VIII** – Conventional energy sources – Natural gas, coal and nuclear
Discussion Questions followed by group discussion and group presentations
- Class IX** – Other sources – wind, photovoltaic, hydrogen, hydroelectric, geothermal, fusion;
Discussion Questions followed by group discussion and group presentations
For next class, read *The Party is Over* Ch. 5 ("Adjusting to Low Energy Way of Life")
Prepare for next 2 classes by preparing answers to discussion questions
- Class X** – Basic needs – food, heat/cool, transportation, environment, health & information
Questions followed by group discussion and group presentations
- Class XI** – National, political, & social consequences; Global upheavals with energy decline
Discussion Questions followed by group discussion and group presentations
For next 2 classes, read *Party Over* Ch. 6, Afterword ("Managed Shrinkage & Likelihoods")
Prepare for next 2 classes by preparing answers to discussion questions
- Class XII** – Managed shrinkage applied to home, community, nation, and globe
Discussion Questions followed by group discussion and group presentations
- Class XIII** – A plea for realism; Saudi enigma; Oil reserve games; Latest studies; Hope for

technological miracle; Electing new kinds of leaders
Discussion Questions followed by group discussion and group presentations

Class XIV – Short story due on 2059 family, Midterm Exam on *Party's Over* – Intro, Chs.1-6
For next class, read *Plan B 2.0* – Chapter One ("A New World")
Prepare for next class by preparing answers to discussion questions

Class XV – Midterm return; Humanity's demands on nature vs. nature's regeneration;
Societal collapses in past; Plan B being tried by a few countries; Discussion
Questions followed by group discussion and group presentations
Read *Plan B 2.0* – Chpt.3 ("Emerging Water Shortages")
Prepare for next class by preparing answers to discussion questions

Class XVI – Descending water levels; Dwindling rivers & lakes; Effects on agriculture & fish
Discussion Questions followed by group discussion and group presentations
Read *Plan B 2.0* – Ch.4 ("Warming & Consequences")
Prepare for next class by preparing answers to discussion questions

Class XVII – Rising temperatures; Melting glaciers & polar ice; Sea rise; Storm strengthening
Discussion Questions followed by group discussion and group presentations
Read *Plan B 2.0* – Ch.5 ("Natural Systems Stressed")
Prepare for next class by preparing answers to discussion questions

Class XVIII – Shrinking forests; Topsoil loss; Collapsing fisheries; Disappearing species
Discussion Questions followed by group discussion and group presentations
Read *Plan B 2.0* – Ch. 6 ("Signs of Early Decline")
Prepare for next class by preparing answers to discussion questions

Class XIX – Our social divisions; Health challenges; Resource conflicts & refugees
Discussion Questions followed by group discussion and group presentations

Class XX – Exam on *Plan B 2.0*, Chs.1,3,4,5, 6
Read *Plan B 2.0* – Ch. 7 ("Eradicating Poverty and Stabilizing Population")
Prepare for next class by preparing answers to discussion questions

Class XXI – Universal basic education; Stabilizing population; Improving health; HIV/AIDS;
Reducing farm subsidies & debt; Poverty eradication financing
Discussion Questions followed by group discussion and group presentations
Read *Plan B 2.0* – Ch. 8 ("Restoring the Earth")
Prepare for next class by preparing answers to discussion questions

Class XXII – Bringing back forests; Water needs for nature; Restoring fisheries;
Protecting plant and animal diversity; The cost for restoration
Discussion Questions followed by group discussion and group presentations
Read *Plan B 2.0* – Ch. 9 ("Feeding Seven Billion [Humans] Well")
Prepare for next class by preparing answers to discussion questions

Class XXIII – Improving land productivity; Better use of water; Getting more protein; Moving down the food chain; Discussion Questions & Group Presentations
Read *Plan B 2.0* – Ch.10 ("Stabilizing Climate")
Prepare for next class by preparing answers to discussion questions

Class XXIV – Higher energy efficiency; Harnessing the wind; Hybrid cars; Solar cells; Geothermal energy; Cutting carbon emissions; Discussion Questions & Group Presentations
Read *Plan B 2.0* – Ch. 11 ("Designing Sustainable Cities")
Prepare for next class by preparing answers to discussion questions

Class XXV – City ecology; Better urban transport; City farming; Reducing urban water use; Dealing with urban slums; Bringing nature into cities; Discussion & Presentations
Read *Plan B 2.0* – Ch. 12 ("Building a New Economy")
Prepare for next class by preparing answers to discussion questions

Class XXVI – Shifting taxes; Subsidies; Ecolabeling (natural products); Material recycling; Some natural disasters as wake-up calls; Discussion & Group Presentations
Read *Plan B 2.0* – Ch. 13 ("Building a New Future")
Prepare for next class by preparing answers to discussion questions

Class XXVII–Tipping points in the environment; Mobilization to assure the future; What individuals can do; Discussion Questions & Group Presentations

Class XXVIII–Short story on family in 2109 due; Exam on *Plan B 2.0* Chs.7-13

Grading Policy: In most regular classes (24), there will be a set of discussion questions on the readings posted on Blackboard that relate to the reading for that class as well as group presentations based on situations related to the readings. A student may earn up to 10 points per class for his/her contribution to the discussion and group presentations. These class points will be posted on blackboard. There are 3 exams each worth 100 points. There are 2 short stories of at least 2,000 words where a family is portrayed in the context of the material presented in the text readings. Each typed short story will be graded on clarity, creativity, and the usual norms for papers. Each short story is worth up to 50 points. Both the short story scores and test scores will be posted in a timely manner on Blackboard. The maximum point total will be $240+300+100 = 640$. To allow for a few absences, the point totals for the final course grades are adjusted to:
Above 539 = A, 539-480 = B, 479-420 = C, 419-360 = D, Below 360 = F.

Paper Policy: Papers are due on dates given in syllabus. Since the papers are based more on a grasp of the readings than a laborious process of citing references, multiple drafts, etc. there will be no extensions. The papers are submitted as typed, double-spaced pages numbered with a title and author name prominently displayed on top of page 1. If there are a number of characters, it would be helpful to have a list of characters, with each character briefly described, particularly in terms of their relation to each other. In exceptional cases, the papers may be sent electronically to the instructor the day of the previous class (before paper is due).

Contact person: Robert Doyle, RDoyle@frostburg.edu

Honors Junior Seminar – Topic: Urban Education

College Studies L689 Credits: 3
Marcella L. McCoy, Ph.D. - Instructor

PHILADELPHIA UNIVERSITY
Marcella L. McCoy, Ph.D. - Director

General Description

This course will explore gender-separate education at the high school level where the curriculum focus is on career exploration. A secondary component of the course will examine the partnership of private organizations with public school management. Students will spend 12 hours at a gender-separate, career focused charter high school assisting teachers with in class instruction. The sites for the student service are Rhodes Young Women's Leadership and Fitz Simons Young Men's Leadership High Schools in North Philadelphia, where the gender separation is in its first year. **(7 Students enrolled)**

TEXTS

Course Packet: Articles on gender separate education in secondary schools, career education, and partnerships between public schools and private educational management organizations.

Datnow, Amanda and Lea Hubbard, Eds. Gender in Policy and Practice: Perspectives on Single-Sex and Coeducational Schooling. New York: RoutledgeFalmer, 2002.

Sax, Leonard. Why Gender Matters. New York: Doubleday, 2005.

Suskind, Ronald. A Hope in the Unseen: An American Odyssey from the Inner City to the Ivy League. New York: Broadway Books, 1998.

SYLLABUS

PHASE I INITIAL RESEARCH

AUGUST 29 – OCTOBER 10

Week 1 Gender Article Summaries & Discussion – Course Pack

Week 2 Gender Survey Design & Interviews
Discussion of Why Gender Matters...

Week 3 Gender Analytical Essays Due

Week 4	EMO Article Summaries & Discussion
Week 5	Site Visit & Schedule Set Up / Meet site faculty & Students Discussion of Site Visit / Research questions discussion
Week 6	Research review & discussion
Week 7	Research Papers on EMOs due
PHASE II ON SITE INSTRUCTION (DATA COLLECTION)	
OCTOBER 17 – NOV. 7 INDEPENDENT READINGS: A HOPE IN THE UNSEEN & CAREER ARTICLES	
Week 8	Post Career Education articles Summaries – Course Pack On Site
Week 9	On Site / Post Site Reflections in Black Board Journal Black Board Discussion of <u><i>A Hope in the Unseen</i></u>
Week 10	On Site/ Post Site Reflections in Black Board Journal Black Board Discussion of <u><i>A Hope in the Unseen</i></u>
Week 11	On Site/ Post Site Reflections in Black Board Journal Black Board Discussion of <u><i>A Hope in the Unseen</i></u> ** <i>Campus Lecture: Cedric Jennings, subject of <u>A Hope in the Unseen</u></i>
PHASE III RESULTS / ANALYSIS	
NOVEMBER 14 – DEC. 8 <u><i>Gender in Policy and Practice</i></u> – resource text	
Week 12	Discussion & Review of questions and results / Entries completed
Week 13	Results / Analysis Draft due addressing hypotheses & Questions
Week 14	Preparation for campus presentation of research/ site visits
Week 15	Campus Presentation
Final	Paper Due

Grading Policy / Graded Assignments

ANALYTICAL ESSAY on impact of gender-separate education 20 %
 This assignment will require the class to design a query, conduct and analyze interviews /
 focus group, in addition to students' assigned and independent readings.

- RESEARCH PAPER on private management of public schools 15%
Students will review literature on private management debate, and results of this partnership in urban public school systems.
- SITE INSTRUCTION 20%
In place of meeting as a class, students will spend the course equivalent (3 hours/ week) at the sites assisting teachers and professionals with in class material / mentoring 11th graders on study skills and work ethics. Honors will cover transportation costs (bus tokens/ gas). Both schools are a 10-minute drive or a short bus ride from campus.
- JOURNALS 15%
Students will submit weekly journal entries via the course BB site of their On Site Instruction experiences. Entries should include any observations or experiences relating to the hypotheses, in addition to other relevant information and notable responses/ reflections on their participation.
- PRESENTATION 10%
Students will deliver a presentation to the campus community and Victory Schools based on the essay and research paper. The conclusion of the presentation will feature hypotheses and research questions resulting from their site participation.
- FINAL PAPER 20%
Students will use their preliminary research and reflect upon their participant observation at the schools to address the research questions posited in the presentation. The paper should consist of a critical analysis of their observations in response to the questions posed in the hypotheses.

Contact person: Marcella McCoy, MccoyM@philau.edu.

Looking to the Future: The Everglades: from Beginning to End?
IDH 4007 & 4008: FOURTH YEAR HONORS SEMINAR – Fall 2006 & Spring 2007
Peter Machonis / Devon Graham Florida International University

The fourth year Honors theme is "Looking to the Future" and addresses contemporary issues. This course focuses on **the Everglades National Park (ENP)** – examining not only the Everglades eco-system and the politics surrounding its conservation, but also literature and art about the Everglades, such as the photographs of Clyde Butcher and novels that use it as a setting, like Peter Matthiessen's *Killing Mr. Watson*. In addition to intellectual participation, this course requires active participation from students; most classes take place outdoors and involve hiking, biking, canoeing, and slough slogging. Class meets every other Friday (9 AM – 5PM) at off-campus locations and is team taught by FIU Honor's College Faculty, Dr. Peter Machonis, a linguist, and Dr. Devon Graham, a tropical biologist, along with guest lecturers and rangers.

Course Overview:

The first semester concentrates on the origins of the ENP idea, looking at the impressions of 19th century naturalist John James Audubon, early movements to protect the Everglades, and legislation that led to the dedication of America's first biological national park in 1947 by President Truman. Students also study the natural origins of the Everglades, and “class” involves plant, habitat and wildlife identification, as well as “inhabiting the lives” of early explorers.

Much of the original Everglades were destroyed as South Florida grew, and the remnants still face strong threats to survival. The second semester focuses on efforts to "save the Everglades", and includes an in-service clean-up project at Chekika, a recent Park addition. Students also develop projects, culminating in a poster session at the ENP Visitor's Center.

Students are required to participate in class discussions and write journal entries reflecting their readings and experiences. There will be short quizzes every class and a final exam (fall semester only), which will involve identification of flora and fauna, familiarity with ecosystem features and functions, and questions on the literature read.

Students need reliable transportation to all locations: Everglades National Park, Flamingo, Shark Valley, Everglades City, etc. Car-pooling is encouraged. In addition to books, students must purchase a pair of binoculars (\$50-100), and pay for certain activities (e.g., canoe/bike rentals; ~\$15-20 for some classes). Students should expect physical exercise and wet feet!

REQUIRED BOOKS:

Grunwald, Michael. 2006. *The Swamp. The Everglades, Florida and the Politics of Paradise.*

New York: Simon & Schuster.

Lodge, Thomas E. 2004. *The Everglades Handbook: Understanding the Ecosystem.* 2nd Ed.

Boca Raton, FL: CRC Press.

Sibley, David Allen. 2003. *The Sibley Field Guide to Birds of Eastern North America.* New

York: Alfred A. Knopf.

Willoughby, Hugh L. 1898. *Across the Everglades.* Port Salerno, FL: Florida Classics Library.

Hurston, Zora Neale. 1937. *Their Eyes Were Watching God.* New York: Harper & Row.

Matthiessen, Peter. 1990. *Killing Mr. Watson.* New York: Random House/Vintage Books.

Hiaasen, Carl. 2004. *Skinny Dip.* New York: Warner Books.

RECOMMENDED BOOKS:

Alden, Peter *et al.* 1998. *National Audubon Society Field Guide to Florida*. New York: Knopf/Chanticleer Press.

First Semester Syllabus (IDH 4007) – Fall 2006

Sep. 1 First meeting at FIU and airboat tour

Bring to class: *The Everglades Handbook*

9:00 – 11:30 FIU - On Campus: Introductions; course overview; how to prepare and dress; overview of Everglades habitats; field guides, general Everglades texts

1:00 – 2:00 Airboat Tour - **Coopertown Air Boat rides** (11 m west of FIU on US 41)

2:30 – 3:30 Class discussion - **Miccosukee Hotel & Gaming Resort** (US 41 & Krome Ave.)

Sep. 8: Journal entry #1 due

Bring to all subsequent classes: Relevant readings/texts, bird book, binoculars, WATER, HAT, sun-block, notebook, pen/pencil and lunch

Sep. 15 Taylor Slough (Wet Season)

Readings: *The Everglades Handbook*: both introductions (pp. xxix – xxxiv), chap. 1, 2, 3 (pp. 3-41), chap. 6, (pp. 63-66) and chap. 12 (pp. 127-133); *The Swamp*: chap. 1-3

9:30 – 10:15 **Everglades Visitor Center:** Everglades early history

10:30 – 12:00 **Anhinga Trail and Gumbo Limbo Trail (Wet Season):** Introduction to wildlife

1:30 – 3:00 **Pa-hay-okee Overlook:** class discussion / survey assignment

Sep. 22: SURVEY due

Sep. 29 Canoeing through Sawgrass Prairies and dense Mangrove Forests

Readings: Hugh L. Willoughby. *Across the Everglades; The Swamp* (chap. 4-7); *The Everglades Handbook*: chap. 4, 8, 17, and 19 and chap. 21 (pages 217-221)

9:00 – 2:00 **Nine Mile Pond Canoe Trail**

Oct. 6: Journal entry #2 due

Oct. 13 Sawgrass Prairies, Alligator Holes, Cypress Domes/Everglades Slough Slog

Readings: Zora Neale Hurston. *Their Eyes Were Watching God*; *The Everglades Handbook*: chap 9; *The Swamp*: chap. 8-11 (pp. 117-196); Selected poems of Anne McCrary Sullivan and Robert Penn Warren (“Audubon: A Vision”)

9:00 – 10:00 ENP Artists in Residence Program: Poet Anne McCrary Sullivan

<http://www.versedaily.org/aboutamccrarysullivansr.shtml>

10:00 – 2:00 Everglades Slough Slog

Oct. 20: Journal entry #3 due

Oct. 27 Big Cypress Swamp / Everglades as inspiration

Readings: *The Everglades Handbook*: chap. 5, 7, 13, 18; Peter Matthiessen. *Killing Mr. Watson* (p. 1- 147); *The Swamp*: chap. 12-13 (pp. 197-236)

10:00 – 12:00 Big Cypress Gallery 52388 Tamiami Trail (Ochopee); Clyde Butcher, photographer www.clydebutcher.com/

1:30 – 3:30 Big Cypress Visitor Center & Kirby Storter Roadside Park:
Discussion, “Personal Ad” assignment, project suggestions

Nov. 3: Everglades “Personal Ad” due

Nov. 10 Mangrove Estuaries, Cultural History, the 10,000 Islands (FL West Coast)

Readings: *Killing Mr. Watson* (finish); *The Everglades Handbook*: chap. 10

10:00 – 12:00 The Historic Smallwood Store Museum in Chokoloskee - (meet outside museum)

12:00 – 1:30 Lunch on shore: Discussion of Personal Ads & Review

1:30 – 4:00 Canoe to Sandfly Island

Nov. 17: Journal entry #4 due (if you already submitted 3 journal entries, this one is optional)

Nov. 30: 2nd Semester Project Proposal Due

Dec. 1 Florida Bay: Canoe Trip & Final Exam: 9:30 – 3:00; meet at Flamingo Marina

Attendance is important – A class of this nature cannot be made up. There are enough bonus points built in, however, that an otherwise diligent student can accommodate an emergency.

Grading:	Reading Quizzes	20%	Field Quizzes	20%	Survey	5%
	Discussion/participation	20%	Final Exam	10%	Personal Ad	5%
	Project Proposal	5%	Journals	15%		

Reading Quizzes: Given at the beginning of class, starting Sept. 15th. NO MAKE-UPS. These are easy if you’ve kept up with the material and include general questions on the day’s readings.

Field Quizzes: Given toward the end of every class, starting Sept. 15th. NO MAKE-UPS. These include questions on habitats and identifications of flora/fauna we have seen/discussed in class. You will need binoculars at times and may consult notes and field guides.

Discussion/Participation: Students are also graded on participation. This includes:

- being on time and staying for the entire class
- showing interest in what is taking place and asking intelligent questions
- not whining excessively about weather/physical discomfort during class activities
- learning how to canoe effectively, learning to identify wildlife, plants, etc.
- participating in discussion about the literature read and answering questions in the field

Journal: Journal entries give an opportunity to respond thoughtfully to the material and ideas presented in class. We encourage creativity and independent thought. A typical journal entry will be an engaging **1000-word** introspective essay that is fun to read. It should be based on the readings, as well as class experience/field notes. It does NOT simply summarize, but shows that you as a self-conscious observer are making connections. Alternatively, you may use the readings, class discussion, and your field experiences as points of departure for developing new ideas, creative writing, works of art, etc. Consult us if you have any doubts as to what is appropriate. For examples of past journal entries, see <http://everglades.fiu.edu/fiu/idh4007/> Four journal entries are indicated on the syllabus, but you are only required to submit three.

Survey: You will be asked to administer an Everglades survey to 20-30 people and discuss the results. The survey will be given to you the week before it is due.

Personal Ad: You will design a “personal ad” for any everglades animal (or plant). You should research the life, habits, and habitat of your everglades animal (plant) and write a plausible personal ad for it. It should be creative, humorous, and factually correct.

Project Proposal: Since a large part of your 2nd semester grade will be on your project, you will be asked to choose a subject, and explain how you would research it. The proposal should include a bibliography with at least 10 entries, of which 70% must be peer reviewed sources.

Final Exam: The final exam will involve identification of flora and fauna, along with questions on the literature read. Since it will be given in a canoe, it will be mainly short answer objective questions. No books or notes allowed except during the “identification” portion of the exam.

Second Semester Syllabus (IDH 4008) – Spring 2007

Jan. 19 Everglades Roadside Clean-up: East Everglades (Chekika)
9:00 – 5:00 In-service component: all-day Everglades Roadside Clean-up

Jan 26 Birding at Taylor Slough (Dry Season) and the beginnings of ENP
Reading: *The Swamp* pp. 170-171, 204-210, & 239-303
10:00 – 12:00 **Anhinga Trail (Dry Season)**
1:00 – 3:00 **Gumbo Limbo Trail & Old Ingraham Highway** - Cathy Torres (Women’s Studies): The role of early 20th century society women in the creation of ENP

Feb. 2: Journal entry #1 due

Feb 9 The Hole in the Donut Restoration Project: Brazilian Pepper Removal
Reading: *The Swamp* pp. 304-370
10:00 – 3:30 Coe Visitor Center (10:00 – 12:00); Daniel Beard Research Center (1:00 – 3:30)

Feb. 16: Journal entry #2 due

Mar 2 Shark Valley Bike Trip (10:00 – 3:00); meet at Shark Valley Visitor Center
Reading: *Skinny Dip* by Carl Hiaasen

Mar. 9: Optional journal entry #3 due (Extra Credit)

Mar. 29/30 Poster Preview On campus: 10 AM – 3 PM (Sign-up for 30 min. session with professors for poster improvement suggestions – to fully benefit, your poster should be almost complete)

April 6 Poster Session at Main Visitor Center (10 AM – 1 PM)

Set-up: 9:30 – 10:00 AM. Posters will be displayed in Visitor Center for 2 weeks
General Discussion with park rangers after poster evaluations

Grading: Participation/Discussion 16% Reading Quizzes 12% Journals 10%
Project (Poster Session) 50% **Field Quizzes 12%**

Journal: only two entries are required, but you may write three for a maximum of 15 points. These may be creative reactions, but technical or project related papers are also encouraged.

Quizzes will be similar to fall semester. No quizzes for the in-service class.

Project: There will be fewer classes and no final. Instead, you will design, develop and carry out a project on some aspect of the Everglades. The project grade will be based on a resulting poster that will need to be well laid out, accurate in content, creative and original, and that shows independent thought and interpretation and use of appropriate resources. Your professors and at least three park rangers will judge posters on the following criteria (20% each): appearance, content, originality, interpretation, and research/work.

Science and the Imagination
HONR 303 – 3 credit hours
Mark Hall, Professor of English
Andrew Lang, Professor of Mathematics
Oral Roberts University
University Honors Program
John Korstad, Director

General Description:

This course examines the relationship between science and science fiction from a historical and critical viewpoint. Through lecture and discussion, students learn how science and science fiction influence each other. Students respond to readings through class discussion and appropriate writing. This course is designed to increase the students' understanding of the history and development of science, scientific theory, and science fiction as well as to sharpen their critical skills through the examination of science fiction novels and short stories.

Texts:

Baxter, Stephen. *The Time Ships*. 1992. New York: Eos, 1996.
Card, Orson Scott. *Ender's Game*. 1985. New York: Tor Books, 1994.
Card, Orson Scott, ed. *Masterpieces: The Best Science Fiction of the 20th Century*. New York: Penguin Group, 2004.
Clarke, Arthur C. *The Collected Stories of Arthur C. Clarke*. New York: Orb Books, 2002.
Crichton, Michael. *Jurassic Park*. 1990. New York: Ballantine, 1991.
Heinlein, Robert A. *The Moon is a Harsh Mistress*. 1966. New York: Orb Books, 1997.
Lewis, C. S. *Out of the Silent Planet*. 1938. New York: Scribner, 2003.
Miller, Walter, Jr. *A Canticle for Leibowitz*. 1959. New York: Spectra, 1997.
Orwell, George R. *1984*. 1948. New York: Signet Books, 1990.
Silverberg, Robert, ed. *The Science Fiction Hall of Fame*. Vol. 1. 1971. New York: Orb Books, 2005.
Stewart, George R. *Earth Abides*. 1948. New York: Fawcett, 1986.
Warrick, Patricia S., Charles C. Waugh, and Martin H. Greenberg, eds. *Science Fiction: The Science Fiction Research Association Anthology*. New York: Longman, 1997.
Wells, H. G. *The Time Machine*. 1895. New York: Tor Classics, 1992.

Syllabus:

Week 1	A Brief History of Space H. G. Wells, <i>The Time Machine</i>
Week 2	The Earth and the Moon Stephen Baxter, <i>The Time Ships</i>
Week 3	The Solar System Michael Crichton, <i>Jurassic Park</i>

Week 4	Stars Robert A. Heinlein, <i>The Moon is a Harsh Mistress</i>
Week 5	Life, the Universe and Everything C.S. Lewis, <i>Out of the Silent Planet</i>
Week 6	Nuclear Physics Walter Miller, Jr., <i>A Canticle for Leibowitz</i>
Week 7	The Standard Model for Sub-Atomic Particles George R. Orwell, <i>1984</i>
Week 8	Quantum Mechanics Selected Short Stories
Week 9	From Newtonian Mechanics to Einstein's Special Relativity George R. Stewart, <i>Earth Abides</i>
Week 10	General Relativity Orson Scott Card, <i>Ender's Game</i>
Week 11	The Theory of Everything Isaac Asimov, "Nightfall"; Jerome Bixby, "It's a Good Life"; and James Blish, "Common Time"
Week 12	Negative Energies, Warp Drives, Time Travel, and Anti-Gravity Machines Ray Bradbury, "There Will Come Soft Rains"; John Campbell, "Who Goes There?"; and Arthur C. Clarke, "The Star"
Week 13	Space Exploration: SETI – ESA – NASA Lester Del Rey, "Helen O'Loy"; Harlan Ellison, "'Repent Harlequin!' Said the Ticktockman"; and Stanley Weinbaum, "A Martian Odyssey"
Week 14	Hardware, Software, and Wetware
Week 15	Review and Synthesis
Week 16	Final Examination

Grading Policy:

Critical Analysis Paper (10%)

Science Fiction Novella (15%)
Research Project (15%)
Scientific Worldview Paper (15%)
Exam 1 (Objective & Essay) (10%)
Exam 2 (Objective & Essay) (10%)
Film Critiques (5%)
Final Exam (20%)

Contact person: Andrew Lang, alang@oru.edu