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#### From the PSO President

Syllabi Compete with TV

This new crop of syllabi is welcome. It may be an affront to our dignity as professors, but the fact is that we are competing when we step into our classrooms with the ever growing hijinks of the media, where the number of television channels knows no limits and all kinds of super Hollywood-style production techniques are used, backed by enormous budgets.

We have no brass bands, are afraid of looking foolish if we seem too much like teacher versions of Shirley Temple or Fred Astaire, and probably are unaware of a lot of the entertainment heroes of our students. It is a tough time to keep attention to the blackboard. So frankly at PSO we think it is extraordinary that there isn't more publishing of syllabi so all of us can look at what our colleagues are doing and gain strength from their ideas. It is extraordinary that learned societies, with some exceptions, give so little attention to syllabi in their fields.

There is a rising tide of criticism of how little capital goes into teaching as opposed to what the public thinks is secondary. We can disagree with the premise that teaching should get more attention than it is getting, but if we continue to go that route we do that at our peril. One can hear the purses snapping shut. And why not? Why should people feel they are paying for something they didn't want and not getting what they do want, which is better teaching.

The truth is that the failure to publish more help for good teaching is widespread, has been widespread for many years, and shows no sign of changing. There is a a constant flow of platitudes about improving classroom performance, but precious little really happens. Meanwhile, a new generation is entering school that has a media sophistication that makes professors look sleepy and doddering. There are some great exceptions, but the general level of instruction sorely needs more attention and less excuses.

Paul J. Rich pauljrich@gmail.com



#### Syllabi

This issue of *The Proceedings* is the third and final in a series in which the Policy Studies Organization has published syllabi for courses taught by members of the Science, Technology, and Environmental Politics section of the American Political Science Association. In this issue, we have included three syllabi on topics in science and technology politics. We hope that you will find them useful when thinking about your own courses on related subjects.

David Konisky Georgetown University

Chair, Science, Technology and Environmental Politics Section American Political Science Association

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- I. Politics of Science & Technology
  Matthew Shapiro, Illinois Institute of Technology
- II. Darwin and the Politics of Evolution
  David Prindle, University of Texas, Austin
- III. Politics of the Internet
  Jeffrey Hart, Indiana University

#### **Politics of Science and Technology**

Matthew Shapiro Illinois Institute of Technology

#### 1. Course Description

This is an intermediate course on the connections between politics - power-oriented relationships and dynamics - and science and technology (S&T). There is no single formula for understanding these relationships, but we can identify several patterns that predominate.

First, **discussion of S&T, broadly defined, is typically held between elites.** This means that the general public is excluded intentionally. Is this absence of "democracy" in S&T ideal? Does it conflict with political ideology or legal rules? We will attempt to answer this based on theories of policy making and coordination in government.

Second, **innovation is a risky venture**, and this translates into (1) inaction by the private sector and/or the government or (2) action which does not conform to public values. We will look at the repeated attempts by the government to incentivize innovation from the private sector in the face of such risks. We will also look at how failing efforts lead to political fallout for policy makers. In this way, **the government itself is entrepreneurial** but must also limit risk by having a corps of savvy individuals to make well-informed, S&T-related decisions. We will look at a number of cases in which groups of these "technocrats" have been successful and when they have failed.

Third, **S&T typically go hand-in-hand with development and economic growth.** We can identify this today with the push from above (i.e., from our elected leaders) to focus on renewable energy, clean coal technology, and innovations in the infrastructure for curbside recycling. Why is there this push? A reduction in costs from such innovations is equivalent to economic growth/increased income. These innovations come with a hefty price tag, though, and we will examine how S&T transfers from the developed to the developing world, how S&T develops indigenously, and how politics plays a role in both the developed and developing worlds.

We cannot be overly deterministic about the politics-S&T relationship. This class is as much about the S&T of politics as it is about the politics of S&T, and we will examine this through study of **innovations in e-government**. This represents the cutting-edge of government design, particularly vehicles in which messages are communicated (e.g., Internet, YouTube, Twitter) as well as elections (e.g., computerized voting stations, transparency in campaign contributions). Beyond this, we will discuss how the S&T of politics – particularly through **increased communication channels with the public** – requires us to reevaluate our traditional cache of political and policy-making theories.

#### 2. Required Readings

There are two required texts:

David Dickson (1988) *The New Politics of Science,* Chicago: University of Chicago Press.

Philip N. Howard (2006) *New Media Campaigns and the Managed Citizen,* New York: Cambridge University Press.

#### 3. Course Requirements

#### **Course Objectives**

This class will enable the student to understand at a deep level how politics and S&T are connected. At the end of the course, the student will be able to:

- o distinguish between and apply theories of policy making to S&T
- o understand how market failures and government failures in S&T occur
- o assess how politicians set the agenda in the context of S&T
- identify the role of technocrats in a democracy as well as in pseudodemocracies
- o interpret and assess varied S&T options for low- and high-income areas and work through the complexities of measuring S&T-related "development"
- o understand the various innovations representative of "e-government"
- o collect data and engage in qualitative and/or quantitative analysis

#### Grading

Final grades are based on the following requirements:

Short papers (3 x 15%) 45% Final project 35% Participation 20%

**1. Short papers** (3 x 15% each): You will be given a set of questions that will require you to consult the readings and your lecture notes approximately one week before each short paper due date. Your response to the prompt must be between 3-4 pages (excluding bibliography), double-spaced, Times New Roman 12 pt. Keep the following in mind: The papers should be well organized, cohesive, free of errors. The best way to create a paper with such qualities is through careful revision and editing. Use whatever citation style you prefer so long as it is error-free and uniform throughout the paper.

Short paper 1 due session 10 Short paper 2 due session 20 Short paper 3 due session 30

**2. Participation** (20%): Students are expected to attend class with only one unexcused absence. Students are also expected to complete reading assignments prior to class and participate in class discussions.

#### 3. International project (35%):

Read Chapter 4 from Dickson and World Bank (1999).

Science and technology transfers from the developed to the developing world happen but not without major political and economic challenges. For this project, you will identify an instance in which an innovation in the U.S., Germany, or Japan (currently the world's most research intensive countries) was developed for the purpose of being transferred to the developing world but has been met with opposition. The "developing world" is defined as countries with a GDP per capita of less than \$4000. (The list is available on Blackboard: see "World Bank list of developing economies".)

## Task 1: Provide details about this innovation, how it was proposed, and how it qualifies as something that was developed for the purpose of being transferred to the developing world. How is the transfer of this innovation consistent with the content of Dickson, Ch. 4?

Such opposition to transfers (political, economic, or both) can come from the S&T-originating country as well as the S&T-receiving country. Also, such opposition does not necessarily have to preclude the transfer.

# Task 2: Explain the nature of such opposition. How does it qualify as political, economic, or both political and economic opposition? Use the literature (especially Dickson, Ch. 4) from class to establish your qualification criteria. After identifying this innovation and providing background information as to how it was developed, consider possible connections to the elite theory of governance. With regard to the World Bank (1999) reading, where were national strategies weak? Where were there information failures?

### Task 3: If there are connections to the elite theory of governance and the elite-democratic tension, identify them.

Finally, make your own assessment.

## Task 4: Identify shortcomings in the entire approach to transferring the innovation. Where could there have been greater efficiencies? Do such efficiencies align you at one end of the elite-democratic scale, and does that create any problems (and why or why not)?

Your paper must be between 5-6 pages (excluding bibliography), double-spaced, Times New Roman 12 pt. The final two sessions of the course are reserved for presentations of your work. Keep the following in mind: The papers should be well organized, cohesive, and free of errors. The best way to create a paper with such qualities is through careful revision and editing. Use whatever citation style you prefer so long as it is error-free and uniform throughout the paper. Final project due **session 29**.

#### 4. Class Schedule and Reading Guide

While "\*" below indicates required reading, you should still expect to read some if not all of the non- required reading when drafting your short papers and your final project.

#### Sessions 1—4

- **❖** An introduction to key terms and concepts
- **❖** A statistics primer
- **❖** The underlying theory of the politics of S&T
- **❖** A brief history of the elitist-democratic tension
- ❖ Modeling behavior via cost-benefit analysis and making connections to the elitist- democratic tension
- (1) \* Vig (1988), Ch. 1 from Kraft and Vig
- (2) \* Link and Link (2009), Ch. 2
- (3) Winner (1988), Ch. 2 from Kraft and Vig
- (4) Ray, Appendix 2
- (5) Stone (2001), Introduction and Ch. 1
- (6) \* Keller (2009), Ch. 1
- (7) "Racial discrimination in science"
- (8) \* Nelkin (1979), Introduction
- (9) Hart (1998), Ch. 8
- (10) \* Slayton, (2007)
- (11) Dickson, Ch. 5
- (12) Olmstead, Sheila M. (2010)
- (13) \* Brooks (1988), Ch. 8 from Kraft and Vig
- (14) Dickson, Ch. 6
- (15) Krimsky (1979), Ch. 12 from Nelkin
- (16) \* Greenberg (2001), Ch. 28 from Greenberg
- (17) "Stimnovation"

#### Sessions 5—9

- ❖ An introduction to key actors and institutions: the President, Congress, scientists, the private sector, the courts, and the public
- **\*** Ethical concerns
- **❖** Updates: legislation, actor interactions, federalism
- Acknowledging how these actors and institutions operate in a theoretical context: the policy streams model

- (18) Kraft and Furlong, Ch. 2
- (19) \* Keller (2009), "Credibility and Relevance"
- (20) "Accountability and transparency"
- (21) A New Era of Responsibility (2009), Office of Management and Budget
- (22) "Holdren as Advisor"
- (23) "Presidential science advisers"
- (24) "Merck to Pay \$950 million"
- (25) \* Dickson, Ch. 1
- (26) \* Bimber (1998)
- (27) \* Schneider (2000)
- (28) "Researchers fight against bigger slice to small business"
- (29) Weingart, et al. (2000)
- (30) "The Touchy-Feely Methods"
- (31) "Scientific Community Slams Plan B Decision"
- (32) \* Dickson, Ch. 2
- (33) Mowery and Ziedonis (2001)
- (34) \* "Comments on the DOI scientific integrity policy"
- (35) Union of Concerned Scientists (2008)
- (36) \* Malka, et al. (2009)
- (37) "Hundreds gather to rally"
- (38) "Suffering for science"
- (39) "Personhood supporters regroup..."
- (40) "Stems Cells: The Nuclear Option"
- (41) "Ruling sets back stem-cell scientists in Europe"
- (42) Branscomb and Florida (1998), pages 14-32
- (43) "Ag Department Uproots Science"
- (44) \* Berkman and Plutzer (2009)
- (45) \* Branscomb and Florida (1998), pages 8-14
- (46) \* Robinson and Eller (2010) "Participation in policy streams," pages 199-205
- (47) Montpetit (2011)

#### Sessions 10—13

- **❖** An introduction to "the government as entrepreneur"
- Standardizing, measuring, and assessing outcomes from government intervention
- Understanding the government's attempts to deal with market failures in S&T
- Distinguishing between market failure and mission-oriented approaches

- (48) \* Link and Link (2009), Ch. 1
- (49) Rosenberg (1979)
- (50) \* Noll and Cohen (1988), Ch. 6 from Kraft and Vig
- (51) National Science Board (2010), Ch. 4
- (52) Goel, Payne, and Ram (2008)
- (53) Litan, et al. (2007)
- (54) "From ships to bits"
- (55) \* Jaffe, et al. (2004)
- (56) \* Bozeman and Sarewitz (2005)
- (57) "A stress test"
- (58) Stoneman (1995), selections
- (59) Mowery (2009)

#### Sessions 14—17

- Different forms of government intervention and mixed results
- Primary cases: R&D collaboration via specific programs (SBIR, ATP) and incentives (R&D subsidies)
- **Assessing outcomes from government intervention**
- Contemporary cases
- (60) \* Dodgson (1993), Ch. 4
- (61) \* Butos and McQuade (2006)
- (62) Dickson, Ch. 2 (re-read)
- (63) Scott, et al. (2005)
- (64) \* Link and Link (2009), Ch. 8
- (65) Jaffe (1998)
- (66) NIST ATP report
- (67) "Big and clever"
- (68) Klette, Moen, and Griliches (2000)
- (69) \* Mansfield (1991)
- (70) Fontana, et al. (2006)
- (71) Stiglitz and Wallsten (1999)
- (72) \* Wallsten (2001)
- (73) David, et al. (2000)
- (74) "Red flags for green energy"
- (75) "The Marines go renewable"
- (76) Link and Link (2009), Ch. 6
- (77) Biofuels drawbacks
- (78) "The future of physics"
- (79) "Atom Smashers" (video)

#### Sessions 18—22

- ❖ Defining "development": building on/away from orthodoxy
- **❖** Domestic and international factors within the two-level game structure
- Cases and evidence: indigenous development, technology transfer, and institutional effects
- (80) Guena, et al. (2003), General Introduction
- (81) \* Nelson & Phelps (1966)
- (82) \* Harding (1993), Introduction
- (83) "Holdren as Advisor" (re-read and peruse <a href="http://www.ostp.gov">http://www.ostp.gov</a>)
- (84) \* Book review: "Sustainability and Sources of Wealth"
- (85) Engelbrecht (2002)
- (86) "Climbing Mt. Publishable"
- (87) Putnam (1988)
- (88) "Science Attaches"
- (89) Hascic and Johnstone (2009)
- (90) "Stem cells in China"
- (91) Pray and Ruttan (1995)
- (92) "Farmers and food prices"
- (93) "Science in the future of India"
- (94) "The frugal way"
- (95) \* Helfer (2009)
- (96) Evenson (1995)
- (97) Bessen and Meurer (2008), Ch. 2
- (98) Kim (2003)
- (99) \* Caselli and Coleman (2001)
- (100) Shapiro and Nugent (2012)
- (101) \* Mathews and Hu (2007)
- (102) Comin and Hobijn (2010)
- (103) "China downshifts on autos..."
- (104) "Hong Kong in Honduras"
- (105) Lerner and Tirole (2007)
- (106) "Mosaid assumes 2,000 Nokia patents"
- (107) "Big Patent Firms Sues Nine Tech Firms"
- (108) "USPTO Innovation Challenge"

#### Sessions 23—27

- **❖** Technology's effects on domestic governance and civil liberties
- **❖** Increased communication via technology
- ❖ A very different method of running a political campaign and voting
- **❖** Looking forward...
- (109) \* Spar (2001), prologue
- (110) \* Spar (2001), Ch. 8
- (111) Barber (1998)
- (112) "Who should run the Internet?"
- (113) Kerr (2008)
- (114) \* Resnick (2002)
- (115) "Putnam's America"
- (116) \* Howard (2006), Chs. 1, 3, 4
- (117) "Voter confidence in touch screen voting..."
- (118) "Diebold voting machines can be hacked"
- (119) \* Pielke, 2006
- (120) Morgan and Peha (2003), Ch. 13
- (121) Resnick (2009), Ch. 4
- (122) Resnick (2009), Ch. 9
- (123) Bessen and Meurer (2008), Ch. 9

#### Sessions 28 & 29

Project presentations

#### Session 30 (optional)

❖ Short Paper 3 due

#### Darwin and the Politics of Evolution

Prof. David Prindle University of Texas at Austin

#### 1. Course Description

Charles Darwin's *On the Origin of Species by Means of Natural Selection*, generally shortened to *The Origin of Species*, is one of the two or three most influential science books ever published. But unlike the case with other science books, *The Origin*, published in 1859, is also of profound political importance. Part of this political importance—the implications of Darwin's theory for religious explanations of the diversity of life—is well understood by all socially aware citizens. But there is much less awareness of the political implications of controversies within the science of evolutionary biology founded by Darwin.

In this class I will explicate and explore both the "outside" and "inside" political implications of the science launched by the *Origin*, and ask the students to evaluate them.

#### 2. Required Readings

- Charles Darwin, *The Origin of Species by Means of Natural Selection*, first edition, (Barnes and Noble Classics, 2004) [first published 1859]
- Jerry Coyne, *Why Evolution is True* (Viking, 2009)
- Phillip Johnson, *Darwin on Trial*, second edition, (InterVarsity Press, 1993)
- David Prindle, *Stephen Jay Gould and the Politics of Evolution* (Prometheus Books, 2009)
- A package of readings, available as Web content from Great River Technologies:

To purchase the material from the site:

- a. Go to www.grtep.com
- b. Click on the "Purchase Access Codes" link in the "Register" box
- c. Choose "University of Texas at Austin/Darwin & the Politics of Evolution"
- d. Add the publication to the cart by clicking the + sign
- e. Click "proceed to checkout"
- f. Enter credit card information and register the publication

#### 3. Course Requirements

Each of the three assignments in this class will be counted equally; that is, each will count one-third toward the final grade. At the end of the semester, the three numerical scores will be averaged, and final grades will be assigned on the basis of the conventional scale: 92.3 and above will receive an "A" in the course, 90 to 92 will receive an "A minus," 88 to 89.7 will receive a "B plus," 82.3 to 87.7 will receive a "B," 80 to 82 will receive a "B minus," 78 to 79.7 will receive a "C plus," 72.3 to 77.7 will receive a "C," 70 to 72 will receive a "C minus," 68 to 69.7 will receive a "D plus," 62.3 to 67.7 will receive a "D," 60 to 62 will receive a "D-minus, and below 60 will receive an "F." Anyone missing a grade (that is, anyone failing to take a test or turn in an essay) will also receive an "F." I may make some small adjustments in these averages to reflect the quality of contribution to class discussion.

The three assignments are due **sessions 10, 20 and 31**.

For your three assignments, you may choose to write two essays and take one test, or take two tests and write one essay. It is up to you to decide how you mix the tests and essays, and in what order you choose to do them. You may not, however, "load up" by turning in an essay at the same time that you take a test, thus getting two-thirds of the assignments out of the way in the same session.

#### **ESSAYS**

Essays are due at the beginning of the session the same day as the tests: **sessions 10, 20 and 31**, although you may choose to turn in your final essay early. Each essay must be typed, double-spaced, and no more than five letter-size pages long.

**Topic, first essay**: Summarize the important points of Darwin's argument in *The Origin of Species*. Then evaluate TWO of the sub-arguments Darwin makes in support of his theory. Is his reasoning sound? Is his use of evidence sound? In general, are you persuaded by his argument? If you mention a specific argument, it would be a good idea to cite a page in Darwin's book. It might also be a good idea to incorporate "scientific method" as I discussed it in lecture, and as Stephen Jay Gould discussed it in "The Freezing of Noah" in your reading packet.

**Topic, second essay**: Pick ONE of the controversies we have discussed in this section of the course: the pace of evolution, sociobiology, or the question of whether evolution is progressive. Summarize the controversy, that is, summarize the issue as the people on each side view it. Then evaluate the controversy, that is, explain why you agree with one side or the other. (You may come down on neither side, concluding that it is impossible to choose, but if you do, you must explain why). In your evaluation, be sure that you discuss both the arguments used by each side, and each side's use of evidence. Do not forget to include some of the assigned reading in your discussion.

<u>Topic, third essay</u>: Evaluate modern evolutionary theory and the theory of "Intelligent Design." Pick at least two arguments in favor of Darwinist theory and evaluate them. Pick at least two arguments in favor of ID and evaluate them. (One of your pro-Darwinist arguments can be contra-ID. One of your pro-ID arguments can be contra-Darwinism).

By asking you to "evaluate," I mean discussing and judging the theory's assumptions and logical structure, and also discussing and judging the theory's use of evidence.

Do not forget to include material from the assigned reading in your essay: from Coyne, Johnson, Behe, and Dembski. And also, of course, you will be expected to bring in relevant material from the lectures.

#### TESTS

There are three tests in this class, given **sessions 10, 20 and 31**. Each test consists of two parts. In the first part, there will be twenty-five multiple-choice questions, dealing with concepts to be listed shortly. A correct answer on each of these counts two points. In the second part, you will be given a group of ten words or phrases, also chosen from the lists provided below. You will be asked to <u>define</u> each word or phrase, and then <u>explain why it is important (or significant)</u> to the study of the politics of evolution, all in <u>sixty or fewer</u> words. A correct definition is worth two points, and correct explanation is worth three points, for a total of five points per term. Thus, each test offers a possible perfect score of one hundred, fifty from the multiple-choice questions and fifty from the short-answer questions.

Because it is impossible to predict the direction of every conceptual discussion ahead of time, I may make a few additions to and subtractions from the following list of concepts during the course of the semester. Basically, however, the following list contains all, or almost all, of the concepts that you will be expected to know.

Because I may slightly fiddle with the concept list over the course of the semester, you should remember that the "official" list of concepts that might appear on a test is the one that I put on the screen during lecture. Thus, the concept list on this syllabus is advisory only, and may not be complete.

#### CONCEPTS. FIRST TEST

Concepts from the reading:

Darwin, *Origin*: varieties; "endless forms most beautiful"
Paley, *Natural Theology*: "the watch must have had a maker"
Gould, "The Freezing of Noah:" William Buckland, the diluvian theory *Genesis*: "Let there be light"
Prindle, *Stephen Jay Gould*: comprehensive realism; historical science; reductionism; Left-Wing Social Darwinism

Concepts from the lectures: essentialism; magic; pareidolia; teleology; creation myth; empiricism; induction; deduction; implication; replication; premise; equivocation; ad hominem; spurious correlation; propaganda; argument from design; HMS Beagle; Thomas Malthus; uniformitarianism; Alfred Russel Wallace; fecundity; "struggle;" adaptation; natural selection; evolution; homology; Asa Gray; Social Darwinism; Herbert Spencer; Archaeopteryx; St. George Mivart; exaptation; Lord Kelvin

#### CONCEPTS, SECOND TEST

#### Concepts from the reading:

Gould, "Episodic Evolutionary Change:" "the trade secret of paleontology," stasis Dawkins, *Blind Watchmaker*: constant speedism; *Coelacanth;* "Biblical Creation" Prindle, *Stephen Jay Gould,* Chapter 3 (pp. 81-103): critical elections Barash, *Whisperings Within*: Huntington's chorea; Why is sugar sweet? Somit and Peterson, *Darwinism, Dominance, and Democracy*: hierarchy; "the most fundamental question of all"

Gould, "Our Natural Place:" zoocentrism

Pinker, Blank Slate: The Pronoun in the Machine; "the triumph of sociobiology"

Prindle, *Stephen Jay Gould*, Chapter 4: adaptationist program; spandrel Gould, *Wonderful Life*: Burgess Shale; replaying life's tape; *Wiwaxia* 

Morris, Life's Solution: convergence

#### Concepts from the lectures:

gene; allele; Gregor Mendel; genotype; phenotype; DNA; Modern Synthesis; Sexual Selection; R. A. Fisher; The Central Dogma; methodology; phyletic gradualism; fossil; punctuated equilibrium; creationism; naturalistic fallacy; politically leftwing; politically right-wing; SSSM; Richard Dawkins; sociobiology; evolutionary psychology; Science for the People; Pleistocene era; primeval soup; merit; chance; the "Age of Bacteria;" "contingency"

#### **CONCEPTS, THIRD TEST**

#### Concepts from the reading:

Behe, "Molecular Machines:" cilia; "purposeful arrangement of parts;" "we should take a lesson from physics"

Johnson, *Darwin on Trial*: peacock and peahen; Cambrian Explosion; *Teaching Science*; Karl Popper

Dembski, "Intelligent Design as a Theory of Information:" CSI; Actualization-Exclusion-Specification triad

Coyne, *Why Evolution is True*: "the fitter, not the fittest;" *Ambulocetus*; recurrent laryngeal nerve; Seymour Island; Lucy; lactose intolerance

Prindle, Stephen Jay Gould, Chapter 6: Rhagoletis pomonella; "What creates the fit?"

Concepts from the lectures: "but God guided the process;" "wall of separation;" *Engel v. Vitale*; Scopes Trial; Texas State Republican Platform; Discovery Institute; National Center for Science Education; modernism; secular; First Amendment; Secular Humanism; *Lemon v. Kurtzman; The Genesis Flood; Epperson v. Arkansas; Edwards v. Aguillard; Tammy Kitzmiller v. Dover Area School District*; "Intelligent Design;" irreducible complexity; naturalism; A Designometer?; retrodiction; "provisionally true;" Madagascar hawk moths; Trinidad guppies; *Tiktaalik;* sFltl

#### Miscellaneous Useful Information

- A. Study questions that may help you understand what is important about the terms/phrases/concepts:
- 1. How does this term help us to understand a causal, moral, or interpretive argument in the lectures or reading?
- 2. How does this term illustrate/exemplify an important <u>principle</u> discussed in class?
- B. Answers to common questions about the tests
  - 1. Is it important to know dates? YES; KNOW THE DATES OF IMPORTANT BOOKS (*ORIGIN OF SPECIES,* 1859), COURT DECISIONS (*LEMON V.* KURTZMAN, 1971) AND THEORIES (PUNCTUATED EQUILIBRIUM, 1972).
  - 2. Will I be penalized if I go over the 60 word limit? YES
  - 3. Must I write in complete sentences? NO, BUT IF WE CANNOT UNDERSTAND YOUR ANSWER, IT IS WRONG

#### 4. Class Schedule and Reading Guide

#### I. The *Origin of Species*: context, meaning, politics

Reading: 1. Excerpts from Ch. One of the Book of *Genesis*, in reading package

- 2. Extracts from William Paley's *Natural Theology*, reading package
- 3. Stephen Jay Gould, "The Freezing of Noah," reading package
- 4. Charles Darwin, *On the Origin of Species by Natural Selection*, first edition, chapters 1 thru 6, 11, 13 (pp. 343-361 only), 14
- 5. Prindle, Stephen Jay Gould and the Politics of Evolution, Chapter 2

Session	<u>Topic</u>
1	Introduction to the politics of evolution
2	Reasoning, argument, propaganda
3	Darwin's historical context
4	Movie: "Creation" (2009)
5	"Creation," continued
6	Structure of the theory
7	Documentary: "Life, Darwin, and Everything
8	Reception of the <i>Origin</i> during the nineteenth century
9	Test Review
10	FIRST TEST/FIRST ESSAY DUE

#### II. Modern controversies within evolutionary biology

- Reading: 1. Gould, "The Episodic Nature of Evolutionary Change" in reading package
  - 2. Richard Dawkins, *The Blind Watchmaker*, Chapter 9, in reading package
  - 3. David Prindle, *Stephen Jay Gould and the Politics of Evolution* Chapter 3, pp. 81-103

#### [The above three readings address the topic of the pace of evolution].

- 4. David Barash, *The Whisperings Within*, Chapter 2 (reading package)
- 5. Albert Somit and Steven Peterson, *Darwinism, Dominance, and Democracy*, Chapter 5 (reading package)
- 6. Peter Corning, "The Sociobiology of Democracy: Is Authoritarianism in Our Genes?" (this selection is a book review of *Darwinism, Dominance, and Democracy*)
- 7. Gould, "Our Natural Place," *Hen's Teeth and Horses' Toes*, p. 241 (reading package)
- 8. Steven Pinker, *The Blank Slate*, "Preface" and Chapter 7, reading package
- 9. Prindle, Stephen Jay Gould, Chapter 4

#### [Readings four through nine address the topic of sociobiology].

- 10. Gould, Wonderful Life, pp. 23-52, 189-193, in reading package
- 11. Simon Conway Morris, *Life's Solution*, xi-xvi, 283-310, in reading package
- 12. Prindle, *Stephen Jay Gould*, Chapter 3, pp. 103-109

[Readings ten through twelve address the topic of the progressivity of evolution].

Session	<u>Topic</u>
11	Darwinism in the twentieth century
12	Controversy: The pace of evolution
13	Pace, continued
14	Controversy: Sociobiology
15	Sociobiology, continued
16	Documentary: "The Fifth Ape"
17	Controversy: Is evolution progressive?
18	Progressive? continued
19	Test Review
20	SECOND TEST/SECOND ESSAY DUE

#### III. Darwinism versus creationism in a modern context

- Reading: 1. Michael Behe, "Molecular Machines: Experimental Support for the Design Inference," in reading package
  - 2. Phillip Johnson, *Darwin On Trial*, Chapters 1 thru 4, 9 thru 12
  - 3. William Dembski, "Intelligent Design as a Theory of Information," in reading package
  - 4. Jerry Coyne, *Why Evolution is True,* Chapters 1, 2, 3 (pp. 81-85 only), 4, and 8
  - 5. Prindle, Stephen Jay Gould, Chapter Six, pp. 184-195 only

<u>Session</u>	<u>Topic</u>
21	The modern American politics of evolution
22	Movie: "Inherit the Wind" (1960)
23	"Inherit the Wind" continued
24	Modern politics, continued
25	Documentary: "Unlocking the Mystery of Life"
26	Darwinism and creationism
27	Darwinism and creationism, continued
28	Documentary: "God Strikes Back"
29	Testing Darwinism and Intelligent Design
30	Test Review
31	FINAL EXAM/THIRD ESSAY DUE

#### **Politics of the Internet**

Jeffrey Hart Indiana University

#### **1. Course Description**

This is an undergraduate intensive writing seminar designed to foster original research by students. It identifies the issues, stakeholders, and forums for debates over political issues connected with the Internet (and related information and communications technologies). We will be reading books and articles by authors who have thought deeply about this topic and will be conducting our own research on some issues. Among issues to be considered are: the domain name system, restrictions on the use of file-sharing software, privacy, e-government, e-democracy, e-society, e-commerce, e-crime (e.g., identity theft, cyber-stalking), Web 2.0, social networks, and net neutrality.

#### 2. Required Readings

Andrew Chadwick. 2006. *Internet Politics: States, Citizens, and New Communication Technologies.* 

Jonathan Zittrain. 2008. The Future of the Internet- And How to Stop It.

#### 3. Course Requirements

#### **Main Written Assignments**

The written assignments for the course will be a midterm and final examination, a book report, and a term paper. Grades for the course will depend on grades for the midterm (20%), book report (10%), seminar participation (10%), term paper (30%), and the final examination (30%).

#### 4. Class Schedule and Reading Guide

<u>Sessio</u>	n <u>Topics</u>	<b>Readings</b>
1	Introduction	No readings
2	Concepts	Chadwick, Chs. 1-2

3	Net History	Chadwick, Ch. 3; Jeffrey Hart, Robert Reed, and François Bar, "The Building of the Internet," <i>Telecommunications Policy</i> , 16 (November 1992), 666-689.
4	Digital Divide	Chadwick, Ch. 4; Jan van Dijk, <u>The Digital Divide</u> in Europe; <a href="http://en.wikipedia.org/wiki/Digital_divide">http://en.wikipedia.org/wiki/Digital_divide</a>
5	E-Democracy	Chadwick, Ch. 5; "E-Democracy," Wikipedia.
6	E-Mobilization and E-Campaigning	Chadwick, Chaps. 6-7; PoliticsOnline, <a href="http://politicsonline.com/">http://politicsonline.com/</a>
7	E-Government	Chadwick, Ch. 8; "E-Government," Wikipedia.
8	Midterm Exam	
9	Global Information Society and Internet Governance	Chadwick, Chaps. 9-10; Milton Mueller, " <u>The Politics and Issues of Internet Governance</u> ," April 2007.
10	Surveillance and Networked Computers (and other devices)	Chadwick, Ch. 11; Zittrain, Chaps. 1-4; Jeffrey Hart, "The Controversies over Data Mining and Warrantless Searches in the Wake of September 11".
11	User-Generated Content: Wikipedia, CraigsList, and the Death of Newspapers	Zittrain, Chaps. 4-8; Michael Schudson, "Political Observatories, databases, and news in the emerging ecology of public information."
12	Is Net Neutrality Regulation Necessary?	Zittrain, Chaps. 9-13; Jeffrey A. Hart, "The Net Neutrality Debate in the United States"
13	File Sharing and Digital Rights Management and the Power of Google	Chadwick, Ch. 12; <a href="http://www.youtube.com/watch?v=kHE5ynGcSPc">http://www.youtube.com/watch?v=kHE5ynGcSPc</a>
14	Final project is due	
15	Final Review	
16	Final Exam	



The PSO offices at 1527 New Hampshire Avenue were constructed in 1882 and for many years were the home of the family of United States President James Garfield. A cordial welcome awaits visitors.