

THE GEORGE WASHINGTON UNIVERSITY

IAFF 290.17

“Forward Engagement: Study of Long-Range Developments as Factors in Contemporary National Policy”

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Spring Semester 2006
Wenesdays, 5:10pm – 7:00pm
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Class meets: 1/25, 2/1, 2/8, 2/15, 2/22, 3/1, 3/8, (spring break) 3/22, 3/29, 4/5, 4/12, 4/19,
4/26, 5/2 (Designated Make-Up Day), 5/10 (final presentation; tentative).

Note: All examinations, reports, and other graded work products and assignments are to be completed in conformance with The George Washington University Code of Academic Integrity.

Course Mission Statement:

The rate of major historical change appears to be accelerating, in ways that could challenge our democratic society's ability to perceive events in time to debate and decide upon appropriate responses. If so, then there is a need to combine methods of forecasting with mechanisms for policy making, to create a process that could be called “Forward Engagement.” The *basic premise* of “Forward Engagement,” is that early awareness and early preparation for potentially major events is preferable than awaiting their unambiguous onset.

Students will explore long-range trends and events in science, economics, defense and governance that could have a major impact on our society and on the world in general, by the time today's students reach positions of senior responsibility. Emphasis will be placed, this semester, on the search for trends that are not only of potentially major consequence, but are more consistently longer-range. Participants in this course will explore whether such events could prove particularly challenging to democratic governance. They will also analyze ways in which it would be possible, starting now, to modify policy in the hope of favorably influencing the course and impact of these developments. They will consider ways to

improve the capacity of the government of the United States to perceive and respond to the accelerating rush of future events.

Finally, students will apply what they have learned in a specific scenario (details to be provided separately) that will engage them in the role of the staff of the House Annual Commission on Forward Engagement, preparing one of its periodic survey briefings for the House of Representatives. To do this, they will be asked –as have students in past semesters– to draw upon the work of previous classes, improved by their own insights.

Methodology:

Readings, lectures, guest speakers, contact with experts, class discussion, individual and group work

Grading Output:

Individual papers; group papers; one final collective class paper and briefing. Briefing is to be delivered to an invited panel of guests who have held a senior policy-level responsibility in government. .

Course Structure

The course is broken into five phases:

Phase I: Orientation and Introduction to Forecasting **(Sessions 1-4, from 1/25-2/15)**

The objective of this phase is to familiarize students with Forward Engagement in general, and to introduce them to basic concepts relating to the field of Futures Studies, including standard approaches to forecasting. Students will produce short, individual papers that examine applications of forecasting to past, current or future issues. They will be asked to focus on the limitations as well as the particular capabilities of different approaches, and to spot ways in which these limitations can introduce serious error. This segment of the course will include an initial period for read-in time.

Phase I Readings:

Cornish: *Futuring: The Exploration of the Future*

Proteus: scenarios

Halal: Delphi <http://home.gwu.edu/~halal/Articles/articles.html> (case sensitive)
<http://www.techcast.org/>

Peterson: *Out of the Blue*

Mazarr: *Global Trends 2005* (not on required list)

Phase I Class Schedule

- **SESSION #1 – January 25:** Organization of the class into four working

groups: science & technology; economics; security; and governance.
Discussion of objectives and organization of the course.

First work interval (from January 26 to January 31): Students read into the Welcome Kit and course materials. Students meet for individual appointments with Prof. Fuerth in the opening weeks - arrange through Neil Sroka.

- **SESSION #2 – February 1:** Presentation by professor on forecasting in general, and then on prediction and projection.

Second work interval (from February 2 to February 7): Students prepare individual papers on policy applications, present or future, of Prediction and Projection (see table below). Students can draw upon papers from earlier classes for reference. **Papers are to be e-mailed to esialsf@gwu.edu by noon on February 7.**

- **SESSION #3 – February 8:** Class discussion with professor of student papers on Prediction and Projection. Presentation on Delphi method and Scenario by Prof. Fuerth and possible guest speaker.

Third work interval (from February 9 to February 14): Students prepare individual papers on policy applications, present or future, of Delphi method and Scenarios. . Students who have not met with Prof Fuerth yet should schedule individual meetings with him during this period to discuss their papers. **Papers are to be e-mailed to esialsf@gwu.edu by noon on February 14.**

SESSION #4 – February 15: Class discussion of papers on Delphi Method and Scenarios. Introduction by Professor Fuerth on the concept of Future Contingencies of Interest (FCIs). Guest.

Fourth work interval (from February 16 to February 21): Students read FCIs from work of earlier classes and National Science Foundation report on “Convergence.” NOTE: Each Working Group will review portions of the National Science Foundation report that are appropriate to its field of interest. These chapters are identified in ‘professor’s guide’ provided to students by Prof. Fuerth.

Phase II: Identifying Future Contingencies of Interest (FCIs)

(Sessions 5-7, from 2/22-3/8)

Note: Spring Break 3/11-3/19

During this portion of the course students will research and write about possible major future

developments, selected in terms of magnitude of societal importance, and need for proactive, anticipatory response. Students can build on earlier findings by their predecessors. Concept of convergent FCIs will be developed.

Phase II Readings:

Kurzweil: *The Age of Spiritual Machines*

Dyson: *The Sun, The Genome & The Internet*

National Science Foundation Report on Convergence

Weblink: <http://www.wtec.org/ConvergingTechnologies/> (case sensitive)

(Prof. Fuerth's guide will be made available in class or over email)

Fukuyama: *Our Post-Human Future* (not on required list)

Phase II Class Schedule

- **SESSION #5 – February 22:** Class discussion of earlier work on FCIs by previous groups. Presentation by Professor Fuerth on FCIs, complexity, and nodes.

Fifth work interval (from February 23 to February 28): Students prepare individual papers on convergent FCIs. Paper is to be e-mailed to esialsf@gwu.edu by **noon on February 28.**

- **SESSION #6 – March 1:** Discussion of advanced FCIs based on convergence and matrix approach (professor and guest).

Sixth work interval (from March 2 to March 7): Students prepare an advanced matrix, incorporating convergent FCIs. Paper is to be e-mailed to esialsf@gwu.edu by **noon on March 7.**

- **SESSION #7 – March 8:** Class discussion of advanced matrix. Presentation by professor on overall nature of policy and on methods for approaching statements of policy by first identifying issues.

Seventh work interval (from March 9 to March 21): Students review earlier papers on policy by previous classes.

Phase III: Identifying Policy Issues Relating to FCIs.

(Sessions 8-9, from 3/22-3/29)

Note: Spring Break 3/11-3/19

During this phase, students will shift from considering what might happen (forecasting) to what ought to happen (policy). They will also begin to distinguish between “**policy issues**” as compared to policy recommendations.

Phase III Readings:

To be provided by the Interactivity Foundation.

Phase III Class Schedule

- **SESSION #8 – March 22:** Presentation of policy issues relating to science/technology and economics. Possible guest speakers.

Eighth work interval (from March 23 to March 28): students prepare individual policy papers on science & technology and economics issues. **Papers are to be e-mailed to esialsf@gwu.edu by noon on March 28.**

- **SESSION #9 – March 29:** Review of papers on science and technology and economics policy issues. Presentation on security and governance issues. Guest speaker.

Ninth work interval (from March 30 to April 4): Students prepare individual policy papers on security and governance issues. **Papers are to be e-mailed to esialsf@gwu.edu by noon on April 4.**

Phase IV: Focus on Methods for Policy/Forecasting Integration **(Sessions 10-11, from 4/5-4/12)**

Special attention will be paid to the findings of the last three classes (fall '04, spring '05, and fall '05 focused on the Congress). These recommendations will be central elements of the last phase of the course, when students play out a scenario as members of a Congressional Forward Engagement process embodying proposals for a special new cycle of legislative activity.

Phase IV Readings

Rejeski: *Government Foresight: Myth, Dream, or Reality?*
Lempert: *Shaping the Next One Hundred Years*
Heller: *Who Will Pay?* (not on required list)

Phase IV Class Schedule:

- **SESSION #10 – April 5:** Discussion in class of papers on security and governance. Presentation by professor, on approaches to integration of forecasting and policy.

Tenth work interval (from April 6 to April 11): Students review past papers

on integration and prepare to present (orally) their preliminary conclusions on a Forward Engagement mechanism. Conclusions should respond to the terms of reference given them at the beginning of this semester, in the “scene-setter” memo.

- **SESSION #11 – April 12:** Students to conduct discussion and critiques of earlier proposals for institutional mechanisms to blend forecasting and policy. The focal point of this discussion will be student conclusions as to process and mechanisms for Forward Engagement. The design of these things will be up to students, but in any event the product must arguably meet the requests presented in the scene-setting memo. Class will be joined by graduates of earlier semesters, who will discuss their experience with the final portion of the syllabus (Phase V).

Phase V: Preparation of Final Paper and Presentation. (Sessions 12-15, from 4/19-5/10)

In this phase, students will shift completely into group mode, playing out a scenario, in the course of which they will operate as the staff of HACFE – the (notional) House Annual Commission on Forward Engagement, to prepare and deliver a report to members of the Congress (retired). Students will draw upon their own earlier work for substance, and they will follow (and where necessary, interpret) recommendations developed by the Fall 05 class for process. Details are provided in separate message on scenario, to be provided by professor.

Eleventh work interval (from April 13 to April 18): The class will prepare a dense outline of its overall class paper, working under the direction of the class leader. **This paper should be e-mailed to esialsf@gwu.edu by noon April 18.**

- **SESSION #12 – April 19:** Discussion of dense outline with professor.

Twelfth work interval (from April 20 to April 25): class prepares first draft of overall paper. **Draft is to be e-mailed to esialsf@gwu.edu by noon April 25.**

- **SESSION #13 – April 26:** Discussion of first draft with professor.

Thirteenth work interval (from April 26 to May 1): Students will prepare second draft of overall paper. **This paper should be e-mailed to esialsf@gwu.edu by noon on May 1.**

- **SESSION #14 – May 2:** Discussion of second draft paper with professor.

Fourteenth work interval (from May 3 to May 8): Students complete work on final paper, prepare executive summary and presentation. **This paper is to be e-mailed to esialsf@gwu.edu by Midnight on Monday, May 8.**

- **Session#15 – May 10 (Tentative): Final Presentation by Students to Invited Guest Panel** (Presentation will most likely be held on the *scheduled day of the Final*; date will be confirmed when final schedule is released)

Key Assignments & Dates:

All assignments (excluding final paper) are due by Noon on the day before class (Mondays) at esialsf@gwu.edu; any change in due dates will be announced in class or over email.

Individual case studies on policy applications of Prediction and Projection – February 7
Individual case studies on policy applications of Delphi method & Scenarios – February 14

Individual papers on selected FCIs – February 28
Class group paper and matrix on FCIs, nodes and complexity – March 7

Science & technology group members prepare individual paper on policy issues – March 28
Economic group members prepare individual paper on policy issues – March 28

Security group members prepare individual paper on policy issues – April 4
Governance group members prepare individual paper on policy issues – April 4

Dense outline of final report – April 18
Complete first draft of final report – April 25
Complete second draft of final report – May 1

Complete final report w/ executive summary and PowerPoint – May 8
Final Presentation – May 10 (tentative; will be confirmed when final schedule is released)