

# THE GEORGE WASHINGTON UNIVERSITY

IAFF 288.11

## **Forward Engagement:**

### The Study of Long-Range Developments as Factors in Contemporary National Policy

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Fall Semester 2008  
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Class meets: 9/2, 9/9, 9/16, 9/23, 9/30, 10/7, 10/21, 10/28, 11/4, 11/11, 11/18, 11/25,  
12/2, 12/9, Final Date TBD

*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.*

*Please note that, while core requirements and grading standards are set, elements of this syllabus may evolve as the semester progresses. Student feedback is encouraged.*

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#### **Course Mission Statement:**

The rate of major historical change is accelerating, in ways that challenge the capacity of democratically governed societies to adapt. To offset this trend, it is vital to combine methods of forecasting with mechanisms for policy making. I call this process “Forward Engagement.” The first principle of “Forward Engagement,” is to encourage early awareness of potentially major trends or events, in order to support earlier actions designed shape them. The objective of this course is to explore how this might be done.

Students will:

- Explore basic forecasting methodologies.
- Apply these methods for the study of potentially major trends and events in science/technology, economics/environment, defense/security, and governance/government.
- Examine complexity theory as a means for understanding interactions among simultaneously unfolding events.
- Examine network theory as a basis for considering how to boost the performance of government in the presence of complex events.
- Examine ways in which to meld long-range assessment and policy, including concepts developed by their predecessors in this class, as well as by various ongoing projects promoted by NGOs.
- Participate in a scenario-based exercise to develop and demonstrate their own approach to Forward Engagement, as applied to a major public issue, including both its domestic and international dimensions.

#### **Methodology:**

Readings, lectures, class discussion, individual writings, group work, guest speakers, and **self-initiated** contact with experts.

#### **Grading Output:**

Individual papers; group papers; one final collective class paper and a power-point briefing. The briefing is to be delivered to an invited panel of guests, including some who are theoreticians, but may, as in previous classes, include others who have held a senior policy-level responsibility in government. Class performance is also taken into consideration.

Each assignment is due by noon on the day before the corresponding class session. Papers should be emailed to [FEpapers@gmail.com](mailto:FEpapers@gmail.com); any change in due dates will be announced in class or over email. Expectations for each assignment appear on the following pages

#### **Work Schedule:**

The course is arranged in four interlocking blocks, presented below. The presentation of each block begins with a statement of premise, followed by: a layout of the subject matter to be covered in each lecture; work assignment for the intervals of time between lectures, and advice as to the recommended sequence of readings. Where readings are concerned, students will have their own methods. I am suggesting, however, which materials are “best read” as of a certain date.

## **Block I: Orientation and Introduction to Forecasting and Futuring**

**Premise:** Accelerating events are threatening to overtake the response time of democratic systems of governance. To offset this, we need to make more effective use of forecasting methods in order to shorten our response time. This section surveys standard and advanced forecasting methods. (Futuring will be described here as the ability to think flexibly about alternative futures, as opposed to forecasting, which seeks to identify specific events and/or trends.)

### ■ **First work interval (Sept 2 - Sept 9):** Students explore the Welcome Kit (a

**SESSION #1 –Sept 2 :** Discussion of objectives and organization of the course. Discussion of methodology. Organization of the class into four working groups: science and technology; economics and the environment; defense and security; and governance and society. Establish a “scanning” process (systematic search of publications for ideas about longer-range events). Begin selection of class leader and working group chairs (conclude this during the second session).

**SESSION #2 –Sept 9:** First of two presentations by professor on forecasting methodologies, starting with an overview of the field of futures studies, and then focusing on the first two of four basic methods -- prediction and projection

- **Second work interval (Sept 9- Sept 16):** Students prepare individual papers on Prediction or Projection (per individual choice). Papers should explore the use of the selected forecasting method in the development of a policy issue. Papers may examine an actual issue, whether in the past or ongoing. Another option is for students to construct and examine a hypothetical, as opposed to an historical case. Students can draw upon papers from earlier classes, for ideas. These papers can be found on Blackboard. **Expectations for Assignment:** Short, 3-4 pp, papers. Assignment is designed to build awareness of how, by their nature, forecasting methods can shape perceptions of events. The only constraint on choice of topic is that students must pick examples that are pertinent to their working groups. Papers are to be e-mailed to **FEpapers@gmail.com** by noon on Sept 15.

**Best read by the end of this interval:**

Cornish: *Futuring: The Exploration of the Future*

Petersen: *Out of the Blue: Wild Cards and Other Big Future Surprises*

**SESSION #3 –Sept 16:** Class discussion with professor of student papers on Prediction and Projection. Professor presents the third and fourth basic forecasting methods -- Delphi method and Scenario. Overview of advanced methods: eg. mathematical, agent-based models.

- **Third work interval (Sept 16 - Sept 23):** Students prepare individual papers on forecasting characteristics of Delphi method and Scenarios. Papers should explore the use of one or the other of these forecasting methods in the development of a policy issue. Papers may examine an actual issue, whether past or ongoing. Alternatively, papers can construct and examine a hypothetical case. **Expectations for Assignment:** short, 3-4 pp, papers. The only constraint on selection of topic is that students must pick examples that are pertinent to their working groups. Papers are to be emailed to [FEpapers@gmail.com](mailto:FEpapers@gmail.com) by noon on Sept 22.

**Best read by the end of this interval:**

Halal: "The Delphi Method"

<http://home.gwu.edu/~halal/Articles/articles.html> or

<http://www.techcast.org/>

Loescher: *Proteus: Insights from 2020*

Wagner: *Foresight, Innovation, and Strategy: Toward a Wise Future*

Mazarr: *Global Trends 2005* (recommended)

**SESSION #4 –Sept 23 :** Class discussion of papers on Delphi Method and Scenarios. Introduction by professor to the concept of Future Contingencies of Interest (FCIs) and "STEEP" method for analyzing and comparing their effects on social systems.

- **Fourth work interval (Sept 23-Sept 30 ):** Students prepare individual papers on FCIs, and apply the STEEP methodology to them. Students need to develop only one FCI per person. They should pick FCIs that are pertinent to their working groups' field of interest. Papers are to be e-mailed to **FEpapers@gmail.com** by noon on **Sept 29**.

**Expectations for Assignment:** Short, 4-5pp papers. Assignment is intended to get students to think long-range, look for events that arguably will have transformative impact on society: then, use a method (STEPP) for characterizing the effects. Only constraint on choice of topic is that students must pick examples that are pertinent to their working groups.

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**Best read by the end of this interval:**

"Societal Tsunamis 2006" (Conference Proceedings)

"Societal Tsunamis –Working Groups 2007" (Conference Proceedings)

National Science Foundation Report on Convergence

Weblink: <http://www.wtec.org/ConvergingTechnologies/>

Kurzweil: *The Age of Spiritual Machines* (**recommended**)

Dyson: *The Sun, The Genome & The Internet* (**recommended**)

Fukuyama: *Our Post-Human Future* (**recommended**)

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**Block II: Complexity and Policy Formation**

**Premise:** Trends and events and their impacts on society are highly interactive, and cannot be understood if this characteristic is overlooked. This section presents complexity theory as best method for thinking about the nature of these interactions and their implications for efforts to manage events through policy. \_\_\_\_\_

**SESSION #5 –Sept 30 :** Class discussion of student papers on FCIs. Presentation by Professor Fuerth on interactivity among FCIs, and on use of Matrix format to display interactions

- **Fifth work interval (Sept 30- Oct 7 ):** Students, operating within working groups, write individual papers on interactions between FCIs, and collaborate to display results using matrix format. Papers are to be e-mailed to [FEpapers@gmail.com](mailto:FEpapers@gmail.com) by noon on Oct 6 **Expectations for Assignment:** This is a two- part assignment. In the first part, students will suggest ways FCI's interact, presenting their ideas in the form of short papers 2-3pp, using "bullet" format. Students use their own FCIs from previous papers, plus one or more FCIs suggested by other members of the class. In the second part of the exercise, students will combine their ideas papers into matrix form, as discussed in class. For this portion, students will work as groups. Student "chairs" will guide. Four matrices will emerge.

**Best read by the end of this interval:**

Bar-Yam: *Making Things Work*

Rosenau: "Many Damn Things Simultaneously: Complexity and World Affairs"

- **SESSION #6 –Oct 7:** Discussion of matrices prepared by working groups. Presentation of overview by Professor Fuerth on definition of the concept of "policy." Overview of complexity theory, as source of perspective and insight..

- **Sixth work interval – Welcome Kit readings and working group discussions (Professor Fuerth in Singapore)**

**SESSION #7 –Oct 21.** Discussion of student matrices; Professor presents on complexity as core factor in both policy formation and execution. Use of "issues" to map out questions that should precede choice of policies.

- **Seventh work interval (Oct 21- Oct 28).** Students, operating as working groups, prepare a new version of their respective matrix, highlighting issues. Papers are to be e-mailed to FEpapers@gmail.com by noon on Oct 27.

**Expectations for Assignment:** The purpose of this exercise is to shift thinking from forecasting (assessment of what **may** happen, in the absence of government intervention) to policy (assessment of what **ought** to be considered, if government intervention is considered.). Short papers, 3-4pp, bullet format may be used.

**Best read by the end of this interval:**

Interactivity Foundation 2006 report

“Welcome Kit CD” readings on Organization & Complexity

**SESSION #8 –Oct 28:** Students and professor conduct discussion of class matrices. Professor presents further discussion of complexity theory as framework for thinking about FCIs, Issues, and Policies. Class explores case study of strategic planning in Singapore.


- **Eighth work interval (Oct 28- Nov 4 ):** reading period (complexity)

**Best read by the end of this interval:**

**SESSION #9 –Nov 4,** Professor presents on “legacy” systems for policy-making and execution in the U.S., and system failure.

- **Ninth work interval (Nov 4-Nov 11):** read on networked systems

(recommended)  
organization  
Introducing Complexity (recommended)  
**Best read by the end of this interval:**

Chapman: Soft Systems (recommended)   
Chapman: Systems Failure

Capra: The Web of Life (recommended)  
Welcome Kit CD Readings on Organization & Complexity (Continued)

McCarthy et. al., *Network Logic: Who governs in an interconnected world*  
**(recommended)**

**Block III: Networking and Governance**

**Premise:** As discussed in Block II, conventional (“legacy”) forms of organization are failure-prone (i.e. “systems failure”) when confronted by complexity. Both theoretical literature and a growing body of practical application, suggest that networking is an effective way to help

organizations deal with complexity and avoid systems failure. Forward Engagement suggests that networked systems may be particularly well suited for the American political and organizational culture. This section looks at the networking concept and discusses its implications for governance.

**SESSION #10 – Nov 11:** Professor presents on networked systems as response to complexity. Discussion of PNSR, Horizon, Solarium projects. Professor presents this semester’s scenario as test demonstration of this concept, in light of semester’s work.

**Tenth Work Interval (Nov 11- Nov18)**

- Students review past student papers on integration and prepare to present (orally) their preliminary assessments of these proposals. Students will break into two “task forces” (one for the executive branch and one for the Congress) to develop presentations to review earlier ideas relevant to each branch. Presentations to be done in bullet format. E-mailed to [FEpapers@gmail.com](mailto:FEpapers@gmail.com) by noon on Nov 17.
- **Expectations for Assignment:** Two “task forces” of students develop point papers analyzing past student recommendations for FCI/Policy integration. The purpose of this section is to acquaint class members with progression of thinking by students in previous classes, and to encourage new thinking based on compound, executive/congressional interactions.

**Best read by the end of this interval:**

Past Student Reports (Welcome Kit or [www.forwardengagement.org](http://www.forwardengagement.org))

Chapman: *Systems Failure* (Executive Summary)

Networked Governance (Conference Proceedings)

Fuerth: *Strategic Myopia: The Case for Forward Engagement*

Kamarck: *The End of Government...As We Know It* (Recommended)

RUNNING THE WORLD (selected chapters-Recommended )

Project for National Security Reform: Literature Review on Organizational

Structure:[http://www.pnsr.org/pdf/Organizational\\_Structure\\_Literature\\_Review\\_draft.pdf](http://www.pnsr.org/pdf/Organizational_Structure_Literature_Review_draft.pdf)

**SESSION #11 – Nov 18:** Students and professor conduct discussion and critiques of earlier proposals for institutional mechanisms to blend forecasting and policy.



***Eleventh work interval (Nov 18 – Nov 25):*** Students draft loose outline of final report: Full class effort, under guidance of “chair.” Professor provides oversight and guidance.

#### **Block IV: Upgrading Systems**

***Premise:*** *There are practical ways to develop systems that are able to integrate complex information and policy within a networked operational framework. Forward Engagement argues that, although there may be ways to bring this about in a one-step reform, deep systemic change can also be brought about by incremental steps. This section involves a student activity to experiment with ideas about such an approach, as part of a scenario exercise. The scenario will focus on a particular significant complex of public policy issues, to be selected by agreement among students. Results will be presented to a panel of invited guest experts.*

**SESSION #12 –Nov 25:** Discussion of concept paper in loose outline form, with professor.

***Twelfth work interval (Nov 25- Dec 2):*** Students draft dense outline of final report: Full class effort under guidance of “chair.” Professor provides oversight and guidance.

**SESSION #13- Dec 2:** Discussion of dense draft with professor.

***Thirteenth work interval (Dec 2- Dec 9):*** Students create first full draft of final report: Full class effort, under guidance of “chair.” Professor provides oversight and guidance.

**SESSION #14 – Dec 9:** Discussion of draft paper with professor.

■ ***Fourteenth work interval (Dec 9 – TBD ):*** Students complete final report w/ executive summary and PowerPoint: Full class effort under guidance of “chair.”  
**The report is to be e-mailed to FEpapers@gmail.com by 11:00pm Dec 7th**

**SESSION #15 –Date TBD: *Final Presentation by Students to Invited Guest Panel***