SRA 471 (3) Informatics, Uncertainty and Risk in the Post-Modern World of the 21st Century

Spring 2017

Dr. Stan Aungst, B.A., B.A., M.A., M.B.A., Ph.d. - Professor In Charge of Seminar

Room IST 210, M,W, 2:30 – 3:45 PM. Office Hrs. after class and by appointment.

Course Description

The Post American World explores the shifting role of the United States in this rapidly changing landscape of world affairs and the Megatrends that will undo the world unless we (U.S.) take action. What will the world look like in 2030? Today social and political change can happen in an instance. Through the assistance of the Global Tends report, The Future Declassified and Out of the Mountains, The Coming Age of the Urban Guerilla, we will attempt to forecast and manage the tectonic shifts that will drive us to 2030. What are the key threats and opportunities facing the United States? Which way are the Middle-East, China, and Russia headed? In this High Risk, High Tech Society of the twenty-first century with the threat of transnational insurgency and domestic terrorism, How does the United States lead in this era of “Globalization” with competition from the New Emerging Market Multinationals (B.R.I.C.) and Threats from Transnational Insurgents, Human Traffickers, Piracy and Drug Cartels? Are cities rather than countries the critical unit of analysis for future conflict and resiliency, and not stability?

Usually, when Americans think of modern warfare, what comes to mind is the U.S. Army shrimishing with domestic terrorists and world-wide insurgents for example, in the mountains of Afghanistan but the face of global conflict is ever-changing with non-state actors (Al-Kaeda, Hezbola and ISIS). In this course we will examine the possibility of future conflict after today’s wars end? We will examine and analyze future conflicts and future cities and about the challenges and opportunities that four powerful megatrends – population, urbanization, costal settlements, (litteralization) and connectedness (Networks) are creating across the planet and what cities, communities and businesses can do to prepare for a future in which all aspects of human society, economics, politics, commerce (licit and Illicit) – including but not limited to religious & social unrest, political non-representation, conflict, terrorism, crime, human and drug trafficking and random acts of violence are changing at an unprecedented pace.

In this course, we will attempt to make sense of this rapidly changing landscape because economic soundness, stability and growth are highly correlated with national security and the United States interest in the National Security and the “Global Economy”. None of this will be easy for the United States. America stands at the crossroads: In a new global era where the U.S. no longer dominates the worldwide economy, orchestrates geopolitics or overall cultures, can The U.S. continue to innovate and thrive? If we want to secure our future, we cannot
disengage from the rest of the world. We will only be in charge of our destiny if we come to terms with the multifaceted technological revolution and begin to make some deliberate choices. From the realities of rampant urbanization and the future growth in a Global Middle Class, to eastward shift in economic power and a growing number of disruptive technologies, the future reminds us that every aspect of our lives is in flux and if we do not take charge and direct those developments, we put ourselves at their mercy. It is the great story of our time, the story will undoubtedly shape the future of global power.

Course Objectives

Give Statement: Economic Stability and Growth are inextricably connected to National Security – Thus, We must have a sound economy, innovate and sustain economic growth

1. The United States Economic role in Globalization and as a Strategic economic power are at the cross-roads. What should be our Objectives, e.g. A National Productivity Strategy acknowledging the Rise of the New Emerging Market Multinationals? We will discuss and attempt to solve this problem with new strategies to lead in this international competitive global arena of today and the future.

2. Toward a National productivity Strategy with limited but important government role—Trumponomics to the extent that one can discern such a guiding philosophy at this early date appears to be one one key goal: growing middle-wage jobs by limiting low-skill immigrants, building more infrastructure and most important reviving U.S. manufacturing, in part by radically limiting the transfer of jobs offshore. This helps explain why the president elect has touted his deal to prevent Carrier from moving about 1k manufacturing jobs to Mexico.

2. The United States Strategy on Global and Local Insurgency - to understand non-state groups (e.g. Drug Cartels, Street Gangs, War Lords draw their strengths from local populations and the way these groups try to control populations and the way those populations manipulate them in return (Primary Objective). A secondary objective is to begin the search for a paradigm that goes beyond the confines of classical counterinsurgency theory, possibly a theory of resiliency and competitive adaptive behavior?

Methodology

Theoretical Framework from:

Applied General Systems Theory
Systems as a Biological System
Urban Metabolism: The City as a System
The Theory of Spaces and Place from a Human Geography Perspective
Computer Information Systems and the Importance of the Internet
Theory of Competitive Control extended to Urban Competitive Control

Possible Guest Speaker and Documentaries from the following Topics:

Dr. Peter Forester, Dean of On-line Eduation on the Spread of ISIS globally.
Dr. Sonya McMullan, USAF Col. (Ret.) The Vulnerability of GPS Technology or Dr. McMullan’s Selected Topic.

Readings from:


The World is Flat. 3.0, A Brief History of the 21st Century, by Thomas Friedman, Picador Press, 2007.


The Tender Soldier, A True Story of War and Sacrifice by Vanessa Gezari, Simon & Schuster 2013.

Course Methodology:

Lectures, Quizzes, Current Events, Student Individual Case Leading Discussion and Analysis and Small Team Projects Presentation on a Team Selected Project on Economics/Marketing, Productivity Strategy, Information Technology, Cybersecurity, and Crime focusing on Drugs, Gangs, Warlords and Pirates and Transnational and Domestic Terrorism.

Grading Rubric

Dr. Aungst Lectures on selected Above Topics: 4 Quizzes @ 10 each 40 Pts.
Current Events One Page each: 4 @ 5 each (NOT CUT and PASTE) 20 Pts.
Individual Student Lead Case Assessment (50 Pts Per. Case) 20 Pts
N.B. Each Student will lead the Course Discussion 2 times = 100 Pts/Student 100Pts
(See Oral Grading Rubric, 50 Pts./Presentation)
Small Team Case Study Presentation (50 Pts.) and Write-Up (100 Pts) 150Pts.
(Case Topic must be approved by Dr. Aungst during 3rd week of class
Total Possible Points 310Pts.

N.B. Extra Credit may be available for Successfully completing Dr. Bacastow’s on-line Introduction to Geo-Spatial Intelligence & Analysis via a completion Certificate.

Basic Instructional Process: Seminar with Students-Led Discussion

Student Assessment:
1. 1 Week ahead of Schedule delivery student identifies his/her student led Case Reading and submits a form about the Case Topic He/She will present.
2. Students leads in-class discussion with peers.
3. Instructor completes rubric-based assessment (same rubric for all student led Case discussions)
4. Students complete peer assessment.

Grading Scale

Approximate Letter Grading

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<thead>
<tr>
<th>Score Range</th>
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<tr>
<td>94-100</td>
<td>A</td>
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<td>90-93</td>
<td>A-</td>
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<td>87-89</td>
<td>B+</td>
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<tr>
<td>84-86</td>
<td>B</td>
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</tbody>
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80-83    B-
77-79    C+
70-76    C
60-69    D
Below 60    F

N.B. Attendance will be taken occasionally by Dr. Stan Aungst and could affect your final grade in the Class. This is a Seminar Class.

**Academic Integrity**

According to the Penn State Principles and University Code of Conduct:
Academic integrity is a basic guiding principle for all academic activity at Penn State University, allowing the pursuit of scholarly activity in an open, honest, and responsible manner. In accordance with the University’s Code of Conduct, you must not engage in or tolerate academic dishonesty. This includes, but is not limited to cheating, plagiarism, fabrication of information or citations, facilitating acts of academic dishonesty by others, unauthorized possession of examinations, submitting work of another person, or work previously used without informing the instructor, or tampering with the academic work of other students.
Any violation of academic integrity will be investigated, and where warranted, punitive action will be taken. For every incident when a penalty of any kind is assessed, a report must be filed. This form is used for both undergraduate and graduate courses. This report must be signed by both the instructor and the student, and then submitted to the Academic Dean.

**Affirmative Action & Sexual Harassment**

The Pennsylvania State University is committed to a policy that all persons shall have equal access to programs, facilities, admission, and employment without regard to personal characteristics not related to ability, performance, or qualifications as determined by University policy or by Commonwealth or Federal authorities. Penn State does not discriminate against any person because of age, ancestry, color, disability or handicap, national origin, race, religious creed, gender, sexual orientation, or veteran status. Direct all inquiries to the Affirmative Action Office, 211 Willard Building.

**Americans with Disabilities Act**

IST welcomes persons with disabilities to all of its classes, programs, and events. If you need accommodations, or have questions about access to buildings where IST
activities are held, please contact us in advance of your participation or visit. If you need assistance during a class, program, or event, please contact the member of our staff or faculty in charge.

An Invitation to Students with Learning Disabilities

It is Penn State’s policy to not discriminate against qualified students with documented disabilities in its educational programs. If you have a disability-related need for modifications in your testing or learning situation, your instructor should be notified during the first week of classes so that your needs can be accommodated. You will be asked to present documentation from the Office of Disability Services (located in 116 Boucke Building, 863-1807) that describes the nature of your disability and the recommended remedy. You may refer to the Nondiscrimination Policy in the Student Guide to University Policies and Rules.

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