

**POGO 750 DL1 Dangers of Technology: AI and Beyond (Elective Course
Taught Completely On-line) Spring 2019**

From Professor Ruth---hello everyone—here is the current syllabus for the course. For Spring 2019 the format will be identical but we will also be covering some of the more recent technology policy challenges like cryptocurrency, digital divide and others. If you have any questions, please contact me.

Thanks

**Steve Ruth
Professor of Public Policy, Schar School**

**School of Public Policy
George Mason University
Fall Term 2018**

**POGO 750 DL1 Dangers of Technology: AI and Beyond (Elective Course
Taught Completely On-line)**

<p>For a 12 minute video description of this on line course by the instructor <u>click here</u></p>
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Instructor: Stephen Ruth, Professor of Public Policy

Office hours: By appointment

Room: Ruth: Founders Hall 541

Email address: ruth@gmu.edu and stever3992@aol.com;

Phone Ruth: 703 993 1789; home: 703 536 5343 (please no calls after 8 PM)

Instructor's Personal site <http://policy-icasit.gmu.edu/bio/index.html>

Face-to-face Classes: None—course is fully on line

Description of Course:

Over the years the instructor has offered a wide variety of elective courses aimed at studying the public policy implications of information and communications technology (ICT). Examples are: Islam and the Internet; the Internet – Technology or Tyranny? ; Facebook and Public Policy; the Technology Tuition Paradox; Blogs, Social Networks and Public Policy; International Issues in E Government, and others. **This on line course, equally aimed at geeks and non-geeks, places the student directly in the midst of one of the most significant policy dilemmas imaginable – unpredictable and undisciplined growth of the Internet and related technologies coupled with increasing powerlessness of governments to exert any control. Of particular interest in the course will be the effects of Artificial Intelligence and robots, both of which continue to be in the center of many public policy debates concerning job displacement, dangers of "accidental" wars, etc.**

The course format allows students to specialize in several areas among dozens associated with the potential dangers of ICT, like the “Dark Web”, Revenge Porn, Ransomware, Bots and Scrapers, Internet Dating, Phishing, Internet fraud, Hactivism, the “Twitter effect”, and many others. A partial list can be found [here](#) and [here](#).

Notice about this Hybrid Course:

It is a completely on line—so both student and instructor are required to have a continuous, productive and content-specific communications on line from beginning to end. In fact, 35 percent of the course's grade is based on the quality and frequency of on line participation. So if being face-to-face is what you like best in a college course, this section of PUBP 750 may not be for you.

There will be extensive class participation—far more than in a face-to-face class—but all of it will be Internet-based. **Caution: this course requires considerably more original writing than the average course.**

Overview of Course Goals: Approaching the Course Topics from Three Perspectives: Review of Intellectual Territory, Broad Analysis of Selected Major Policy Themes and Individual, Focused Research

The aim of this course is to examine challenges associated with key ICT/Internet issues of the day--legal, educational, governmental, military, business, health, etc. We will approach this broad subject from three perspectives in order to offer maximum coverage and ample customization of course material to students' needs. **First**, there will be continuing emphasis on the intellectual territory surrounding ICT and the Internet. The aim is maximum breadth, to cover as many of the most important concepts, cases and challenges as possible. The course will present, often in on line lectures, some of the well-known thinkers in these areas, and examples of contemporary issues.

The second, and most significant, perspective is that of public policy. Questions abound. Is the globalized world really flat, as Thomas Friedman used to say, or are there differences of opinion among the experts about globalization's actual breadth effects? To what degree will the increasing impact of globalization in delivering business and government services change standards of living in the US and overseas? Is the "Digital Divide", domestically and globally, a serious problem, and if so, what can be done to alleviate its effects? Can Artificial Intelligence and robotics alleviate labor problems? What economic effects is broadband proliferation deployment having on the body politic? Is there enough bandwidth in the world? Why is Congress unable to pass bills that are designed to reduce cyber terror? Will telemedicine and other Internet interventions cause major reductions in the death rates due to starvation in the world's poorer countries or will twenty thousand children continue to die of hunger and malnutrition every day? Which national security issues are most affected by IT and globalization? We will divide these policy matters into several dozen segments and each student in the course will be able to select six areas for further research. To aid in this goal a database and extensive class readings will be available from the first week with excellent, current citations. Of course most of the cites will be found by you, the course participants, but these will be a start.

The third perspective is the student's own. An individualized portfolio and a research paper will allow each person enrolled in the course to select a half dozen subjects for more detailed review. This research perspective has the goal of encouraging each student to learn more about many chosen topics within the course's coverage by delving more deeply into the literature surrounding it.

Learning Objectives:

By the end of the course students should have an understanding of the positive and negative aspects of ICT through these learning activities:

1. Discuss and analyze the potential damaging effects of several dozen ICT applications, through careful review of reports, recent literature and other sources
2. Determine the potential role of artificial intelligence and robotics in economic and social contexts
3. Delineate various policy approaches to solving ICT problems
4. Discuss, analyze and critique the actual legislation that is being proposed currently aimed at dealing with these problems
5. Review, compare and contrast The effect on the body politic of social technologies like Internet Dating and Facebook.
6. Examine, compare, contrast, and predict international differences in IT deployment and long term infrastructure development.
7. Discuss and evaluate National Security and defense aspects of The ICT challenges that are being faced
8. Develop proficiency in examining the manifestations and challenges of on line learning.
9. Examine policy issues surrounding the eCulture, including eGovernment, eLearning, eCommerce, eVoting, eMedicine, ePornography, eWaste, etc. and their long-term impact in a globalized economy.
10. Discuss, analyze and critique the broader IT debate on topics like digital divide, cyberthreats, pollution, Internet taxation, net neutrality, and others.

Requirements, Grades and Examinations:

There are **four** requirements for completing the course:

1. Extensive participation in class discussions 35 percent—throughout the semester

2. Review and analysis of individualized portfolio selection (student chooses portfolio topics) 25 percent—first half of semester. Portfolio directions and samples [here](#)
3. Research project 20 percent—second half of the semester
4. A final exam (take home) 20 percent—end of the semester (distributed at week 11)

1. Class Participation (35%):

Every week each member of the class is expected to participate actively on the Blackboard discussion site. There are **two types of on line participation**:

- **Formal bi-weekly posts** that reflect your views on the assigned readings and your portfolio are in the minimum range of **450 or more** words and should have several qualities, like relevance, comprehensiveness, coherence, clarity and focus, in addition to being well written. See sample below. A formal post is due every other week by 7 PM Monday.
- **Informal posts** are expected as part of the discussion and should be about whatever is on your mind, but please remember that a simple post that says something like, "I agree" or "Right on" with no indication of the "because" part is not very helpful. A minimum 4 informal posts are due every week. This covers all aspects of interaction from the first class to the last, like sharing information or perspectives through emails, occasional snippets, comments and insight, etc.

Samples of formal and informal posts can be found [here](#)

2. ICT portfolio (25%):

Each student selects a portfolio of several ICT topics during the first half of the semester and reports on the selected material as part of the weekly course discussions: on-line and in-class. At week 8 the student posts a detailed summary of the findings on the six portfolio topics on the class site. Several

samples of completed portfolios are to be found at the course site. The ICT Portfolio instructions are [here](#).

3. Research project (20%)

Students select, with instructor's approval, a short, highly focused research project related to the course material. Target minimum length: 200 words. Due date: November 14

4. The final exam (20%):

The final exam will be a take-home test with five questions. It will be distributed during week 11 and will require about 10-12 hours of preparation

	August 27	December 13
Formal bi-weekly posts	X X X X X X X X X X X X X X X X X X	
Informal posts	X X X X X X X X X X X X X X X X X X	
ICT portfolio	XXXXXXXXXXXXX	
Research project		XXXX X X X XXXXXX
Final Exam		X X
X X X		

Weekly Schedule—please note that actual assignments will be shown at the course web site and the ones noted below are tentative-after week 1 the course web site will replace this syllabus as the basis for assignments.

Week 1: Introduction to on line approach—daily posts, other course details; AI in Job Displacement

Week 2: AI, Algorithms, Government Issues

Week 3: AI “Nightmare Scenario” and AI in Medicine and Health Care

Week 4: Robots and robotics—policy implications

Week 5: Phishing and Hacking—plagues that get worse

Week 6: Major existential threats: the dark web and attacks on the power grid

Week 7: Internet of Things—convenience or potential calamity?

Week 8: Hactivism and censorship—difficult to prevent and getting worse

Week 9: Cryptocurrency—replacement for money and possibly a new model for the Internet--or serious challenge?

Week 10: Internet Dating, Revenge Porn Cyberbullying—are they related?

Week 11: Ransomware, doxing, swatting and fraud—robbing money and reputations

Week 12: Challenges of Social Networks

Week 13 Thanksgiving holiday week

Week 14 Review and analysis of student portfolios

Week 15 Review and Synthesis

Technology Requirements

Hardware:

You will need access to a Windows or Macintosh computer with at least 2 GB of RAM and access to a fast and reliable broadband internet connection (e.g., cable, DSL). A larger screen is recommended for better visibility of course material. You will need speakers or headphones to hear recorded content and a headset with a microphone is recommended for the best experience. For the amount of Hard Disk Space required to take a distance education course consider and allow for:

1. the storage amount needed to install any additional software and
2. space to store work that you will do for the course.

If you are considering the purchase of a new computer, please go to the [GMU computer store site](#)

Software:

This course uses Blackboard as the learning management system. You will need a browser and operating system that are listed compatible or certified with the Blackboard version available on the myMason Portal. See [supported browsers and operating systems](#). Log in to [myMason](#) to access your registered courses. Some courses may use other learning management systems. Check the syllabus or contact the instructor for details. Online courses typically use [Acrobat Reader](#), [Flash](#), [Java](#) (Windows), Your computer should be capable of running current versions of those applications. Also, make sure your computer is protected from viruses by downloading the latest version of Symantec Endpoint Protection/Anti-Virus software for free at <http://antivirus.gmu.edu>.

Note: If you are using an employer-provided computer or corporate office for class attendance, please verify with your systems administrators that you will be able to install the necessary applications and that system or corporate firewalls do not block access to any sites or media types.

Blackboard Support

Email address for support

courses@gmu.edu

Student support website

<http://coursessupport.gmu.edu/students/>

Are you looking for quick video help about Blackboard? Visit

<http://ondemand.blackboard.com/students.htm>

If you can not log in to myMason please contact the ITU Support Center at (703) 993-8870 or reset your Mason NetID password at

<http://password.gmu.edu>

University Requirements:

Academic Accommodation for a Disability

If you are a student with a disability and you need academic accommodations, please see me and contact the Disability Resource Center (DRC) at 703-993-2474. All academic accommodations must be arranged through the DRC.

SPP Policy on Plagiarism

The profession of scholarship and the intellectual life of a university as well as the field of public policy inquiry depend fundamentally on a foundation of trust. Thus any act of plagiarism strikes at the heart of the meaning of the university and the purpose of the School of Public Policy. It constitutes a serious breach of professional ethics and it is unacceptable.

Plagiarism is the use of another's words or ideas presented as one's own. It includes, among other things, the use of specific words, ideas, or frameworks that are the product of another's work. Honesty and thoroughness in citing sources is essential to professional accountability and personal responsibility. Appropriate citation is necessary so that arguments, evidence, and claims can be critically examined. Plagiarism is wrong because of the injustice it does to the person whose ideas are stolen. But it is also wrong because it constitutes lying to one's professional colleagues. From a prudential perspective, it is shortsighted and self-defeating, and it can ruin a professional career.

The faculty of the School of Public Policy takes plagiarism seriously and has adopted a zero tolerance policy. Any plagiarized assignment will receive an automatic grade of "F." This may lead to failure for the course, resulting in dismissal from the University. This dismissal will be noted on the student's transcript. For foreign students who are on a university-sponsored visa (eg. F-1, J-1 or J-2), dismissal also results in the revocation of their visa. To help enforce the SPP policy on plagiarism, all written work submitted in partial fulfillment of course or degree requirements must be available in electronic form so that it can be compared with electronic databases, as well as submitted to commercial services to which the School subscribes. Faculty may at any time submit student's work without prior permission from the student. Individual instructors may require that written work be submitted in electronic as well as printed form. The SPP policy on plagiarism is supplementary to the George Mason University Honor Code; it is not intended to replace it or substitute for it. (<http://www.gmu.edu/facstaff/handbook/aD.html>). See also the university's academic policy web site at <http://universitypolicy.gmu.edu/>.

Importance of Good Writing and Presentation Skills. From the outset, the highest standard of writing will be expected. [Here](#) is a sample Here are some of the criteria that will be used to measure submitted written work, especially the team research project:

- **Quality of Content:** analytical clarity/persuasiveness; objectivity; quality of source material; use of evidence/methodology.
- **Tone, Structure and Organization:** focused introduction, thesis, conclusion; use of transitions, headings and other cohering strategies; logical paragraphing in support of main points.
- **Mechanics:** Correct citation and documentation; required elements like title page, works cited, page numbering; grammar, spelling, punctuation, etc. All work should be submitted in MS Word Times New Roman 12 or 14 pt. format single or double spaced, depending on the style guide selected
- **Structure:** The normal breaks between paragraphs will be observed, using any style guide you choose. The *Chicago Manual of Style* is available and another popular choice is Diana Hacker, *A Pocket Manual of Style*, (New York, St. Martin's Press, latest edition). Work should be neatly arranged with clear demarcation of sub- units.
- **Grammar:** Impeccable word usage and grammar will be expected in all submitted work. Students may wish to show early work to someone else-- a friend or colleague or the instructor--for a review of style, grammar and other details. Papers with more than a very small number of errors in grammar and word usage will be returned.
- **Method of submission:** All papers will be submitted to the instructor by email as MS Word attachments using a clear description in the subject line of the message. For example: **Julia Jones, Assignment 3.**

Grading: The grade of A or A minus is reserved for a high level of achievement; B and B plus grades indicate good mastery of the material. Grades of B minus and below indicate incomplete achievement of an assignment's requirements. On a 100% scale, A is equal to 95%, B 85%, C 75%

