**TECHNOLOGY, POLITICS, AND THE HUMAN FUTURE**

**GOVT-490: SYNTHESIS SEMINAR**

Spring, 2016

**Professor David M. Hart**

School of Policy, Government, and International Affairs

George Mason University

**Times, Places, and Contact Information**

Class meetings: Thursdays, 4:30 – 7:10 p.m

Office hours: Thursdays, 2-4 pm or by appointment

Office location: Founders Hall 609 (Arlington); Robinson A236 (Fairfax – Thursday only)

Email (preferred): [dhart@gmu.edu](mailto:dhart@gmu.edu)

Office phone (if necessary): 703-993-2279

**Overview**

This course explores where society is going at the grandest level and considers what we can do to lead it to the most promising possible future or, if that is too optimistic for your taste, a future that you wouldn’t be unhappy to live in and have your kids live in, too. The frame for considering possible futures is technological change, including transformations already underway in fields such as robotics, energy, genetics, and space travel. We will think together about how these and related innovations might shape societal ends that we hold dear, such as international security, economic prosperity, environmental quality, and human dignity. We will consider what might be done to influence these outcomes through public policy, social activism, entrepreneurship, and other forms of collective action.

**Learning Outcomes**

This course meets the [Synthesis Requirement](http://masoncore.gmu.edu/general-education-at-mason-2/synthesis/) of the Mason Core. The purpose of the synthesis course is to provide students with the opportunity to synthesize the knowledge, skills and values gained from the general education curriculum. Synthesis courses strive to expand students’ ability to master new content, think critically, and develop life-long learning skills.

This course also meets the [Writing Intensive Requirement](http://masoncore.gmu.edu/general-education-at-mason-2/writing-intensive-2/) of the Mason Core. The course will devote class time to instruction on how to complete assignments successfully, assign and grade a minimum of 3500 words, provide constructive feedback on drafts, and allow revision of at least one graded assignment.

More specifically, students in the course will learn to:

1. Connect issues in the field of political science to wider intellectual, community or societal concerns, and to other disciplines, such as engineering, philosophy, and business;
2. Apply critical thinking skills to evaluate the quality, credibility and limitations of an argument using appropriate evidence or resources;
3. Communicate effectively in both oral and written forms, applying appropriate rhetorical standards; and
4. Receive constructive criticism and revise work appropriately.

**Participants**

This course is primarily for seniors and juniors in the School of Policy, Government, and International Affairs, although it is open to others who have completed their General Education requirements or will do so during the Spring 2016 term.

**Course Texts and Materials**

The following books are required and will be available in the campus bookstore, with the exception of Wade, which is an e-book available through the GMU Library website.

1. Stewart **Brand**, *Whole Earth Discipline: An Eco-Pragmatist Manifesto* (Viking, 2009).
2. Joel **Garreau**, *Radical Evolution: The Promise and Perils of Enhancing Our Minds, Our Bodies, and What It Means to be Human* (Initially published by Doubleday, 2005 but any edition is OK).
3. P.W. **Singer**, *Wired for War: The Robotics Revolution and Conflict in the 21st Century* (Penguin, 2009).
4. Ashlee **Vance**, *Elon Musk: How the Billionaire CEO of Spacex and Tesla is Shaping Our Future* (HarperCollins, 2015).
5. Woody **Wade**, *Scenario Planning: A Field Guide to the Future* (Wiley, 2012).

Additional readings may be made available through the “course content” section of the course Blackboard site or linked to open sources on the Internet through the electronic syllabus, the latest version of which may also be found on the course Blackboad site.

**Format**

This course will use a variety of formats. The most important format is the seminar in which the students and faculty will jointly comprehend, assess, and debate the key ideas in the readings and their implications. The quality of the seminar format depends on student preparation, and students will be held to a high standard in this regard. Occasional lectures will also be given by the faculty and guest speakers. In addition, the class may make field trips to local laboratories and think tanks.

**Assignments and Grading**

* Book, film, or lecture review (1000 words), due February 18, with optional revision due March 24 (20%).
* Analytical paper (1500 words), due March 3, with optional revision due March 31 (20%).
* Scenario plan with presentation (team project), presentation of draft plan in class on April 28, final plan due by midnight on Thursday May 5. (40%).
* Participation, throughout (20%).

Detailed instructions will be provided and discussed well ahead of each assignment due date. The final grade on any revised assignment will be the average of the original and the revision.

Late papers will be penalized one grade level (for instance, from A+ to A) for each calendar day or part thereof, up to a full grade (A+ to B+) each week. The penalty will be applied after any revised assignment has been submitted; it will not be included in the average of the original submission and the revision.

Students need to attend regularly to participate effectively. A student who misses more than three classes will be penalized one full grade on the participation component for each additional class missed.

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

**Electronic Devices**

Cell phones should be off or on vibrate for emergency purposes only. Computers may be used to take notes and consult readings. Computers and phones may not to be used to check e-mail, surf the web, or for any other purpose during class time.

**Plagiarism**

**Read the plagiarism policy attached to the end of this syllabus. Ignorance of or failure to understand the policy will not lead to lenience in case of violation.**

**Course Schedule**

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| Class | Date | Topic | Reading | Assignments, exercises, and guest speakers |
| 1 | January 21 | Thinking about the future | Garreau, ch. 1  Wade, ch. 1 |  |
| 2 | January 28 | Robots | Garreau, ch. 2  Singer chs. 1-2 (skim)  Singer chs. 3, 5-7. |  |
| 3 | February 4 | Artificial intelligence | Garreau, ch. 3-4  Singer, ch. 11 |  |
| 4 | February 11 | Surveillance and big data | Garreau, ch. 5  Singer, chs. 12-14 | Guest: Nathalia Peixoto, GMU |
| 5 | February 18 | Autonomous technology | Singer, chs. 19-22 | Review |
| 6 | February 25 | Human enhancement | Garreau, chs. 6-7 and epilogue |  |
| 7 | March 3 | Genetically engineered organisms | Brand, chs. 1, 5-6 | Guest: Todd Kuiken, Wilson Center  Analytical paper |
| NO CLASS ON MARCH 10 – SPRING BREAK | | | | |
| 8 | March 17 | Smart cities | Brand, chs. 2-3  Wade, ch. 2 | Scenario team formation |
| 9 | March 24 | Climate change and energy | Brand, ch. 4  Vance, chs. 1, 7, 10 (skim); pp. 317-331 (read carefully) | Review – optional revision  Scenario framing |
| 10 | March 31 | Scenario brainstorming – team work | Vance, chs. 6, 8-9 | Analytical paper – optional revision  Guest: M. Danehy, GMU |
| 11 | April 7 | Human space travel | Vance, chs. 2, 11 | Scenario down-selection and cross |
| 12 | April 14 | Planetary management | Brand chs. 8-9 | Scenario story lines and action channels |
| 13 | April 21 | Scenario planning – team work |  | Scenario story lines and action channels |
| 14 | April 28 | Scenario planning – presentations |  | Presentation of draft scenario and action plan |

## SPGIA 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 Policy, Government and International Affairs. 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. 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 Policy, Government, and International Affairs takes plagiarism seriously and has adopted a zero tolerance policy. This may lead to failure for the course, resulting in termination from the program and possible termination from SPGIA. This termination 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), termination also results in the revocation of their visa.

To help enforce the SPGIA 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 a 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 SPGIA policy on plagiarism is supplementary to the George Mason University Honor Code; it is not intended to replace it or substitute for it.

(<http://policy.gmu.edu/honorcode> )

**Professor Hart’s Addendum**

I believe deeply that intellectual integrity is a fundamental element of learning. I firmly support the School’s zero tolerance policy on plagiarism and will enforce it stringently. Ignorance is not an excuse. To avoid plagiarism, a simple rule of thumb may be of help: when in doubt, include a citation. Citations, including those to web sources, should include sufficient information to allow a reader to verify the source. Further details on when and how to cite sources will be discussed in class. However, providing a citation to a block of text taken with minimal change from a source is not sufficient to avoid plagiarism. You must put the block in quotation marks, thereby acknowledging the source’s contribution of specific words as well as ideas in the block.