

# SSCI 578, The Practice of Geospatial Leadership

Syllabus

Units: 4

Term — Day — Time: Summer, 2018, Online

Location: Online

Instructor: Dr. John P. Wilson

Office: AHF B55F

**Office Hours:** Tuesdays, 9-10 a.m. and Thursdays, 4-5 p.m. PT, and by appointment at other times. I am always available asynchronously via email. I am also available for synchronous chats via BlueJeans, audio or video most days and times *by prior arrangement* via email. Just get in touch!

**Contact Info:** jpwilson@usc.edu, 213-740-1908 (office), http://www.bluejeans.com/jpwilson

Library Help: Andy Rutkowski

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### **Course Description**

This course is a required capstone course for the Graduate Certificate in Geospatial Leadership and is aimed at those who aspire to or are considering a future leadership role and want to know what is involved or those already in a leadership role who want to get better at it. Approximately two-thirds of the course is organized around the fundamental challenge of leadership in the geospatial domain. We will start by examining the qualities and skills leaders need to help steer geospatial information management organizations so they can achieve extraordinary results, keeping in mind the various ways in which geospatial information management is changing and the external trends that are driving at least some of these changes. The final one-third of the class will focus on you, affording you the opportunity to reflect on your life and career by completing a life map and a series of self-assessments, culminating in a personal leadership development plan for the final project. That said, this course will cover several topics:

Geospatial Value Proposition – We start by reviewing the geospatial value proposition, identifying the multitude of ways in which geospatial information may add value to human activities, and clarifying some of the ways in which spatially-explicit data can be gathered, organized, and used to serve specific needs.

Leadership Fundamentals — We explore the range of qualities and skills that make for effective leadership using books by Sample and Kurtzman, and some you will find and choose yourselves. The Sample text is used to introduce the art of leadership and to kick off our exploration of this core topic. We will spend the best part of a month reading the Kurtzman text and using this text to help us grasp how a clear understanding and anticipation of the organizational context, an individual's personal leadership contribution, the role of teamwork, and the importance of new ideas along with leadership skills can be harnessed and deployed so organizations can achieve extraordinary results.

Geospatial Leadership Value Proposition – We will also explore how to create spatial thinkers and a culture of geospatial understanding within an organization. The motivation here is to think bigger than the current geospatial users and to clarify how we might teach the capabilities of spatial thinking and the use of geospatial technologies to all members of the organization.

Innovation Practice – Here, we take another look at why ideas matter and how new ideas can be generated, converted, and diffused across an organization or firm to unleash a stream of valuable products, services, and businesses.

Leadership at Work (Workshop) – We will hear from and consult with a series of geospatial leaders who share long and distinguished records of leadership in the geospatial sector. The kinds of individuals I have in mind include Mark Greninger, Chief Data Officer, County of Los Angeles, California, Melisa Caric Lee, Principal of Compass Rose GIS, a full-service GIS consulting firm based in Oceanside, California, Isaiah Mack, Principal of Eclipse Mapping, a full service GPS and GIS consulting firm based in Santa Monica, California, and Professor Josef Strobl, the Founding Chair of the Department of Geoinformatics at the University of Salzburg in Austria. Students will need to arrange and

pay for their own travel, accommodation, and meals to attend this year's workshop in San Diego that will start with lunch on Saturday, 7<sup>th</sup> July and conclude with lunch on Monday, 9<sup>th</sup> July.

Future Trends — This course concludes by exploring future trends in geospatial information management over the next 5-10 years and considering some of the ways in which disruptive technologies (i.e. mobile Internet, the automation of knowledge work, the Internet of Things, 3D printing, etc.) and the business communication revolution will affect the ways in which geospatial information is acquired, analyzed, and used in the next few decades.

All course materials will be organized through Blackboard. The main theoretical concepts will be provided through course notes and assigned readings and the assignments will give students an opportunity to internalize and apply the concepts and theory learned from readings. Some assignments require student interaction, all will benefit from it.

# **Learning Objectives**

When you have completed this course, you will be able to:

- Describe the geospatial value proposition, identifying all of the ways in which geospatial information and spatial thinking can promote human well-being.
- Examine how leaders can help shape a context in which other people will help geospatial information management groups and organizations achieve extraordinary results.
- Assess the organizational culture and an individual's personal leadership contribution.
- Organize teamwork to help geospatial information management groups and organizations achieve extraordinary results.
- Examine the role of personal leadership skills and styles in helping geospatial information management groups and organizations achieve extraordinary results.
- Examine how to create spatial thinkers and a culture of geospatial understanding in an organization.
- Examine how to teach the capabilities of spatial thinkers and the use of geospatial technologies to all members of an organization.
- Discuss why new and innovative ideas matter and how the various elements of a geospatial information management group or organization's innovation practices influence the successful generation, adoption, and deployment of new ideas.
- Critically evaluate how disruptive technologies might affect geospatial information management and the potential to capture and use some of these changes to help a geospatial information management group or organization prosper.
- Develop a vision for how the geospatial information management domain is likely to grow and evolve during the next 5-10 years.

Prerequisite(s): None Co-Requisite (s): None

**Concurrent Enrollment:** None

**Recommended Preparation**: SSCI 585: Geospatial Technology Project Management

## **Technological Proficiency and Hardware/Software Required**

We have several technologies that will facilitate our course work and our interactions, despite our dispersed locations. These include:

<u>Blackboard</u> – All course materials and correspondence will be posted on the course Blackboard site. As a registered student, you will find this course will show up in your available classes no later than 12:00 noon, PT on the first day of classes. It is here that the day-to-day flow of the course will be recorded.

<u>Discussion forums</u> – On the Blackboard site, we will post a number of discussion forums and threads related to various course topics. I may or may not participate in these discussions, but they are vitally important for organizing asynchronous conversations and opportunities for learning from one another.

<u>Live meetings and presentations</u> – At USC, we use a browser-based service called BlueJeans to create synchronous interaction sessions. With voice and webcam capabilities, BlueJeans can be used to share presentations and even our desktops between two or more people.

<u>Individual meetings</u> – While BlueJeans can be used for one-on-one meetings, we sometimes find it easier to use the free VOIP and chat technology such as Skype (http://www.skype.com/) for individual chats.

<u>SSI server and tech support</u> – This course utilizes the SSI Server which is a virtual desktop giving access to many different professional software applications. If you are unable to connect to the server or experience any type of technical issue, send an email to SSI Tech Support at spatial\_support@usc.edu and make sure to copy (cc) me on the email. You will need: (1) a computer with a fast Internet connection; (2) a functional webcam and a microphone for use whenever a presentation or meeting is scheduled; and (3) a modern web browser (Firefox is recommended), to access the GIST Server and to support various elements of this particular class.

### **Required Readings and Supplementary Materials**

<u>Textbooks</u> – There are four books required for this course. Some are available online and some are available from the USC Bookstore or an online outlet such as Amazon. We encourage you to acquire or purchase these books quickly since you need these materials from the first day of class.

- Kurtzman, J. 2010. Common Purpose: How Great Leaders Get Organizations to Achieve Extraordinary Results. San Francisco, CA, Jossey-Bass.
- Sample, S.B. 2003. *The Contrarian's Guide to Leadership.* San Francisco, CA, Jossey-Bass.

- Tomlinson, R. 2013. *Thinking about GIS: Geographic Information System Planning for Managers* (Fifth Edition). Redlands, CA, Esri Press.
- U.S. Department of the Army. 2012. *Army Leadership.* Washington, DC, U.S. Department of Army Headquarters.

These books will be supplemented with Course Notes and a mixture of readings from academic journals, professional reports, and authoritative websites.

<u>Readings</u> – The following monographs, book chapters and journal articles will be posted to Blackboard under Course Documents:

- AlphaBeta. 2016. The Economic Impact of Geospatial Services: How Consumers, Businesses, and Society Benefit from Location-based Information. Sydney, New South Wales, Australia, AlphaBeta.
- Boston Consulting Group. 2012. *Putting the U.S. Geospatial Services Industry on the Map.* Boston, MA, Boston Consulting Group.
- Bradbard, D.A., Fuller, B.K., Townsend, B.B. 2015. Geographic Information Systems in Selected Cities and Counties in the Southeast United States. *URISA Journal*, 27(2), 5-20.
- Carpenter, J., Snell, J. 2013. *United Nations Initiative on Global Geospatial Information Management: Future Trends in Geospatial Information Management, The Five to Ten Year Vision*. Southampton, UK, Ordnance Survey.
- Hansen, M.T., Birkinshaw, J. 2007. The innovation value chain. *Harvard Business Review* (June).
- Hughes, R. 2013. The Business Communication Revolution. Redwood City, CA, BroadVision.
- Manyika, J., Chui, M., Bughin, J., Dobbs, R., Bisson, P., Marrs, A. 2013. Disruptive Technologies: Advances that will Transform Life, Business, and the Global Economy.
   San Francisco, CA, McKinsey Global Institute.
- McCall, M. 1997. High Flyers. Boston, MA, Harvard Business School Press.
- National Geospatial Advisory Committee. 2015. The Changing Geospatial Landscape: A Second Look. Washington, DC, Federal Geographic Data Committee
- Oldfield, D. 1991. *Private Paths, Common Ground.* Washington, DC, Midway Center for Creative Imagination.
- Oxera. 2013. What is the Economic Impact of Geo Services? Report Prepared for Google. Oxford, UK, Oxera Consulting.

### **Description and Assessment of Assignments**

Your grade in this course will be determined on the basis of several different assessment tools:

<u>Exercises</u> – Three exercises will be completed throughout the semester during the weeks specified in the course schedule. This first requires students to post and maintain a public resume, short biography and recent photo on our shared GIST Student Community

Blackboard site. With your permission, your photo and short biographical sketch may be posted to the Spatial Sciences Institute website and your resume will be included in the Spatial Sciences Institute Resume Book. This will count two points towards your final grade for the course and will be used to share your career trajectories with one another. For the second exercise, which contributes four points towards your final grade, students will fill out a self-assessment of their own strengths and weaknesses. For the third and final exercise, which also contributes four points towards your final grade, students will prepare life maps and the Blackboard class site, soon thereafter, will include a "gallery of lives" during which all life maps will be on display for a short period of time.

<u>Presentations</u> – This presentation will follow the gallery of lives and afford each of you an opportunity to tell your story in a small (virtual) group. There is also a second presentation that will provide an opportunity to present and discuss your final projects that is part of the final project and discussed in more detail below

<u>Reflections</u> – One of the most important opportunities in learning from experience is provided by taking time for reflection. For this part of the class, we will ask you to reflect on what was said and/or read, and then write 10 short papers (two-page maximum, typed using a 12-point font and standard margins) identifying two things you learned that were important to you, explaining why these things were important to you, and drawing some implications for your future actions.

<u>Final Projects</u> – The final project requires you to craft a personal plan for the next phase of your growth as a leader. The final report (30 points) and accompanying presentation (five points) should draw on material from the entire course. You may want to include in appendices self-assessments, your life map, etc., so hang on to them, and you may also want to include materials from outside the course that you consider relevant, such as past performance evaluations or advertisements documenting the kind of position you aspire to apply for in the near future. Detailed instructions for the two components that contribute to these final projects will be distributed in class.

### **Grading Breakdown**

Careful planning and a serious, consistent commitment will be required for you to successfully navigate the various deliverables in this and other GIST courses. The table below summarizes the SSCI 578 course assignments and their point distribution:

		Points Per	
Assignment	Number	Assignment	% of Grade
Exercises	3	2-4	10
Presentations	1	5	5
Reflections	10	5	50
Final Projects:			
Presentations	1	5	5
Final reports	1	30	30
TOTALS	16		100

And finally, it is important to note from the outset that: (1) you are expected to attend and participate in every class session and to complete and upload all assignments before the deadlines documented in the Course Schedule; (2) late postings and assignments will be docked one letter grade and no grade will be given for postings or assignments turned in more than one week late; and (3) no written work will be accepted for grading after 5:00 p.m. PT on the last day of classes (i.e. 10<sup>th</sup> August, 2018).

# **Assignment Submission Policy**

Assignments will be submitted for grading via Blackboard using the due dates specified in the Course Schedule below.

#### **Additional Policies**

<u>Communications</u> – This is a distance learning course, so most of our interactions will be asynchronous (not at the same time). All materials to be handed in will be submitted via the Blackboard Assessment link. I will also create one Blackboard discussion forum at the start of the semester and I may create and/or monitor additional Blackboard discussion forums through which we can discuss challenges, ideas, and issues connected with the course assignments, exercises, and projects as the need arises.

In addition, I will send via e-mail through Blackboard any notices that are time sensitive. Please be sure that you read as soon as possible all e-mail sent from Blackboard or from me. Check now to make sure that mail sent from both USC Blackboard and my private domain (jpwilson@usc.edu) does not go into your junk mail!

While I am usually online and will probably respond to emails from students relatively quickly, I will endeavor to respond to all email within 24 hours of receipt, aiming for no more than a 72-hour delay. In the rare case when I expect to be offline for more than 72 hours, I will post an announcement on the Blackboard site.

That said, it is each student's responsibility to stay informed about what is going on in our course. In addition to email about time-sensitive topics, any important announcements will be posted on the Announcement page in Blackboard. Be sure to check these each time you log onto Blackboard.

<u>Workload</u> – This is a four-credit, one-semester course. Students should expect to spend 12-15 hours per week completing the work in this course.

## **Course Schedule: A Weekly Breakdown**

	Topics/Daily Activities	Readings and Homework	Deliverables/ Due Dates
Week 1 5/16* *Class starts on Wednesday, 5/16	Introduction: Introduction to the course and the ways in which the various topics and tasks will be woven together.	Tomlinson (2015)	Submit Exercise #1 no later than 5 p.m. on Tuesday, 5/22
Week 2 5/21	US Geospatial Services Industry: A first look at the geospatial value proposition and the various ways in which	Boston Consulting Group (2012), National Geospatial	Submit Reflection #1 no later than 5 p.m. on Tuesday, 5/29

	geospatial information may add value to human activities.	Advisory Committee (2015)	
Week 3 5/29* *Monday, 5/28 is a university holiday	Economic Impact of Geospatial Services: A second take on the same topics – this time through a report on the economic impact of geographic information services prepared by the Oxera Consulting Group for Google.	Oxera (2013), Bradbard et al. (2015), AlphaBeta (2016)	Submit Reflection #2 no later than 5 p.m. on Tuesday, 6/5
<b>Week 4</b> 6/4	The Art of Leadership: A first look at the art of leadership through the eyes of Steven B. Sample, the tenth president of the University of Southern California.	Sample (2003)	Submit Reflection #3 no later than 5 p.m. on Tuesday, 6/12
<b>Week 5</b> 6/11	Leadership Fundamentals – The Organizational Context: We will use the Kurtzman and U.S. Department of the Army texts to a take a deeper look at the art of leadership over the next four weeks. This first week we look at the leadership disconnect, the new rules of employment, the need for leaders at all levels, and the role of a common purpose for internalizing what an organization stands for.	Kurtzman, Ch. 1-4; U.S. Department of the Army, Ch. 1-2	Submit Reflection #4 no later than 5 p.m. on Tuesday, 6/19
<b>Week 6</b> 6/18	Leadership Fundamentals – Role of Teamwork: We continue working our way through the Kurtzman and the U.S. Department of the Army texts, focusing this week on why the best leaders are part of the group, the need to cultivate curiosity, rather than complacency, and the need to cultivate a culture of leadership and inclusiveness.	Kurtzman, Ch. 5-8; U.S. Department of the Army, Ch. 3-5	Submit Exercise #2 no later than 5 p.m. on Tuesday, 6/26
Week 7 6/25	Leadership Fundamentals – How to Lead: We continue working our way through the Kurtzman and the U.S. Department of the Army texts, focusing this week on how leaders stay positive and determined, the "mental" aspects of leadership, different strokes for different generations, and why you do not need to be ruthless to be an effective leader.	Kurtzman, Ch. 9-12; U.S. Department of the Army, Ch. 6-11	Submit Reflection #5 no later than 5 p.m. on Tuesday, 7/3
Week 8 7/2* *Wednesday, 7/4 is a university holiday	Leadership Fundamentals – Conversations with Geospatial Leaders: We will start with a couple of texts that offer different takes on leadership and conclude the week with a two-day workshop in San Diego. The workshop will	Oldfield (1991), McCall (1997)	Submit Reflection #6 no later than 5 p.m. on Tuesday, 7/10

start with lunch on Saturday, 7 <sup>th</sup> July and conclude with lunch on Monday, 9 <sup>th</sup> July. Part of Sunday will be spent in conversation with 2-3 geospatial leaders and Monday morning will be spent listening to Jack Dangermond and other leaders presenting at the opening session of the 2018 Esri International User Conference.		
Leadership Fundamentals – Why Ideas	Kurtzman, Ch. 13	Submit Reflection #7
Matter: We finish up the Kurtzman text with a review of the first 12 chapters and a first look at why ideas matter if an organization is to achieve extraordinary results.		no later than 5 p.m. on Tuesday, 7/17
Innovation Practice:	Hansen & Birkinshaw	Submit Exercise #3 &
A second look at why ideas matter and how new ideas can be generated, converted, and diffused across an organization or firm to unleash a stream of valuable products, services, and businesses.	(2007)	Reflection #8 no later than 5 p.m. on Tuesday, 7/24
Disruptive Technologies: The first of three classes looking at the current and emerging trends that are likely to affect geospatial information management in the next few decades. This first class focuses on the mobile Internet, the automation of knowledge work, the Internet of Things, 3D printing, and other disruptive technologies.	Manykia et al. (2013)	Schedule Presentation #1 no later than Friday, 7/27, & submit Reflection #9 no later than 5 p.m. on Tuesday, 7/31
Business Communication Revolution: This second look at current and emerging trends focuses on the business communications revolution and how this is likely to affect the ways in which geospatial information is acquired, analyzed and used in the next few decades.	Hughes (2013)	Submit Reflection #10 no later than 5 p.m. on Tuesday, 8/7
Future Trends in Geospatial Information Management: A third and final look at current and emerging trends, this time through the eyes of the UN Initiative on Global Geospatial Information Management.	Carpenter & Snell (2013)	Submit your Final Report & complete your Final Presentation no later than 5 p.m. on Friday, 8/10
	conclude with lunch on Monday, 9 <sup>th</sup> July. Part of Sunday will be spent in conversation with 2-3 geospatial leaders and Monday morning will be spent listening to Jack Dangermond and other leaders presenting at the opening session of the 2018 Esri International User Conference.  Leadership Fundamentals – Why Ideas Matter:  We finish up the Kurtzman text with a review of the first 12 chapters and a first look at why ideas matter if an organization is to achieve extraordinary results.  Innovation Practice: A second look at why ideas matter and how new ideas can be generated, converted, and diffused across an organization or firm to unleash a stream of valuable products, services, and businesses.  Disruptive Technologies: The first of three classes looking at the current and emerging trends that are likely to affect geospatial information management in the next few decades. This first class focuses on the mobile Internet, the automation of knowledge work, the Internet of Things, 3D printing, and other disruptive technologies.  Business Communication Revolution: This second look at current and emerging trends focuses on the business communications revolution and how this is likely to affect the ways in which geospatial information is acquired, analyzed and used in the next few decades.  Future Trends in Geospatial Information Management: A third and final look at current and emerging trends, this time through the eyes of the UN Initiative on Global	conclude with lunch on Monday, 9th July. Part of Sunday will be spent in conversation with 2-3 geospatial leaders and Monday morning will be spent listening to Jack Dangermond and other leaders presenting at the opening session of the 2018 Esri International User Conference.  Leadership Fundamentals – Why Ideas Matter:  We finish up the Kurtzman text with a review of the first 12 chapters and a first look at why ideas matter if an organization is to achieve extraordinary results.  Innovation Practice: A second look at why ideas matter and how new ideas can be generated, converted, and diffused across an organization or firm to unleash a stream of valuable products, services, and businesses.  Disruptive Technologies: The first of three classes looking at the current and emerging trends that are likely to affect geospatial information management in the next few decades. This first class focuses on the mobile Internet, the automation of knowledge work, the Internet of Things, 3D printing, and other disruptive technologies.  Business Communication Revolution: This second look at current and emerging trends focuses on the business communications revolution and how this is likely to affect the ways in which geospatial information is acquired, analyzed and used in the next few decades.  Future Trends in Geospatial Information Management: A third and final look at current and emerging trends, this time through the eyes of the UN Initiative on Global

# Statement on Academic Conduct and Support Systems *Academic Conduct*

Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Part B, Section 11, "Behavior Violating University Standards" (policy.usc.edu/scampus-part-b). Other forms

of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, http://policy.usc.edu/scientific-misconduct.

# Support Systems

Student Counseling Services (SCS) – (213) 740-7711 – 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention. engemannshc.usc.edu/counseling

National Suicide Prevention Lifeline – 1 (800) 273-8255

Provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week. www.suicidepreventionlifeline.org

Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-4900 - 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to gender-based harm. engemannshc.usc.edu/rsvp

## Sexual Assault Resource Center

For more information about how to get help or help a survivor, rights, reporting options, and additional resources, visit the website: sarc.usc.edu

Office of Equity and Diversity (OED)/Title IX Compliance – (213) 740-5086 Works with faculty, staff, visitors, applicants, and students around issues of protected class. equity.usc.edu

### Bias Assessment Response and Support

Incidents of bias, hate crimes and micro aggressions need to be reported allowing for appropriate investigation and response. studentaffairs.usc.edu/bias-assessment-response-support

## The Office of Disability Services and Programs

Provides certification for students with disabilities and helps arrange relevant accommodations. dsp.usc.edu

## Student Support and Advocacy – (213) 821-4710

Assists students and families in resolving complex issues adversely affecting their success as a student EX: personal, financial, and academic. studentaffairs.usc.edu/ssa

### Diversity at USC

Information on events, programs and training, the Diversity Task Force (including representatives for each school), chronology, participation, and various resources for students. diversity.usc.edu

# **USC Emergency Information**

Provides safety and other updates, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible. emergency.usc.edu

USC Department of Public Safety – UPC: (213) 740-4321 – HSC: (323) 442-1000 – 24-hour emergency or to report a crime.

Provides overall safety to USC community. dps.usc.edu

### **Resources for Online Students**

The Course Blackboard page and the GIST Community Blackboard page have many resources available for distance students enrolled in our graduate programs. In addition, all registered students can access electronic library resources through the link https://libraries.usc.edu/. Also, the USC Libraries have many important resources available for distance students through the link http://libguides.usc.edu/distancelearning. This includes instructional videos, remote access to university resources, and other key contact information for distance students.