SSCI 578, The Practice of Geospatial Leadership

Syllabus

Units: 4

Term — Day — Time: Summer, 2021, Online

Location: Online

Instructor: Dr. John P. Wilson
Office: AHF B55F
Office Hours: Mondays, 3-4 p.m. and Fridays, 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 Zoom, 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), see contact page on Blackboard for Zoom room

Library Help: Andy Rutkowski
Office: VKC 36B
Office Hours: Thursdays, 10 a.m. to 12 p.m.
Contact Info: arutkows@usc.edu, see contact page on Blackboard for Zoom room

IT Help: Richard Tsung
Office: AHF 145D
Office Hours: By appointment
Contact Info: spatial_support@usc.edu, 213-821-4415 (office)
Course Scope and Purpose

This course is a required course for the M.S. in Human Security and Geospatial Intelligence and the capstone course for the Graduate Certificate in Geospatial Leadership. The course serves those who aspire to or are considering a future leadership role and want to know what is involved as well as those already in a leadership role, who want to get better at it.

The first part of the course focuses on the fundamental challenges 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 second and final part of the course 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 covers six broad groups of topics:

The 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 focuses on the art of leadership and kicks off our exploration of this core topic. We will then spend the best part of a month reading the Kurtzman 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.

The 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 most 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 will take a second look at why ideas matter and how some of the scientific advances in the geospatial domain can generate, convert, and diffuse across an organization or firm to unleash a stream of valuable products, services, and businesses.
**Leadership at Work** – We will use the 2021 Esri User Conference to take a close up look at one or more leaders who share long and/or distinguished records of leadership in the geospatial sector.

**Future Trends** – The course will conclude by exploring future trends in geospatial information management over the next 5-10 years. We will consider some of the ways in which disruptive technologies (i.e., big data, cloud computing, edge computing, replicability, reproducibility, and sensing, among others) will affect the ways geospatial information is acquired, analyzed and used.

The course notes and assigned readings will convey the main theoretical concepts, 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 Outcomes**

When you have completed this class, 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 the context such that other people will help geospatial information managers and organizations achieve extraordinary results.
- Assess the organizational culture and an individual’s personal leadership contribution.
- Organize teamwork to help geospatial information managers and organizations achieve extraordinary results.
- Examine the role of personal leadership skills and styles in helping geospatial information managers 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 manager or organization prosper.
- Develop a vision for how geospatial information management 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

Class Conduct

Harassment, sexual misconduct, interpersonal violence, and stalking are not tolerated by the university. All faculty and most staff are considered Responsible Employees by the university and must forward all information they receive about these types of situations to the Title IX Coordinator. The Title IX Coordinator is responsible for assisting students with supportive accommodations, including academic accommodations, as well as investigating these incidents if the reporting student wants an investigation. The Title IX office is also responsible for coordinating supportive measures for transgender and nonbinary students such as faculty notifications, and more. If you need supportive accommodations you may contact the Title IX Coordinator directly (titleix@usc.edu or 213-821-8298) without sharing any personal information with me. If you would like to speak with a confidential counselor, Relationship and Sexual Violence Prevention Services (RSVP) provides 24/7 confidential support for students (213-740-9355 (WELL); press 0 after hours)

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:

Blackboard – 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.

Discussion forums – 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.

Live meetings and presentations – We will use a browser-based service called Zoom to create synchronous interaction sessions. With voice and webcam capabilities, we will use Zoom to share presentations and even our desktops between two or more people.

Individual meetings – I find it easier to use either Zoom or the phone for individual meetings.

SSI server and tech support – This course may or may not require the use of GIS and/or remote sensing software. In the event one of you does want or need to use these software tools, you may use the SSI Server that 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 issues, send an email to SSI Tech Support at spatial_support@usc.edu and make sure to copy (cc) me on the email.

You will all need a computer with a fast Internet connection, a functional webcam and a microphone for use whenever a presentation or meeting is scheduled, and a modern web browser throughout the semester for this course.

**Required Readings and Supplementary Materials**

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.


A mixture of readings from academic journals, blogs, monographs, and professional reports will supplement these books and course notes. I have added the following books, monographs, and journal articles to the Course Documents folder in Blackboard:


Description and Assessment of Assignments

Several different assessment tools determine your grade in this course as follows:

**Exercises – 3 worth a total of 10 points.** The first will count for 2 points and require students to post and maintain a public resume, short biography and recent photo on our shared Spatial Sciences Institute (SSI) Student Community Blackboard site. With your permission, your photo and short biographical sketch may be posted to the SSI website and your resume will be included in the SSI Resume Book. This exercise also will be used to share your career trajectories with one another. For the second exercise, which will count for 4 points, students will fill out a self-assessment of their own strengths and weaknesses. For the third and final exercise, which also counts for 4 points, students will prepare life maps and the Blackboard course site, soon thereafter, will include a "gallery of lives" during which all life maps will be on display for a short period.

**Presentations – 1 worth a total of 10 points.** This presentation will follow the gallery of lives and afford each of you an opportunity to tell your story in a small (virtual) group.

**Reflections – 10 for a total of 50 points.** Taking time for reflection provides one of the most important opportunities in learning from experience. For this part of the course, we will ask you to reflect on what was said and/or read, and then write 10 short papers (four-page maximum, typed using a 12-point font, and standard margins). Your answers will respond to two sets of prompts. The first set will ask you about the significance and implications of the topics covered that week and the second set will ask you of identify two things you learned that were important to you, explain why these things were important to you, and draw some implications for your future actions.

**Final Project**

The final project will provide you the opportunity to craft a personal plan for the next phase of your growth as a leader. The final report and accompanying presentation 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. The two components of the final project are:

**Presentation – 1 worth a total of 5 points.** This (second) presentation will provide students with an opportunity to present and discuss their final projects.

**Project Report – 1 worth a total of 25 points.** A written report detailing your personal plan and the various materials and threads you used to develop this plan.

**Grading Breakdown**

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

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Number</th>
<th>Points Each</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>Exercises</td>
<td>3</td>
<td>2-4</td>
<td>10</td>
</tr>
<tr>
<td>Presentation</td>
<td>1</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Reflections</td>
<td>10</td>
<td>5</td>
<td>50</td>
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<table>
<thead>
<tr>
<th>Final Projects</th>
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<tbody>
<tr>
<td>Presentation</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Final report</td>
<td>1</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td>16</td>
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<td>100</td>
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In addition, it is important to note from the outset that:

- You are expected to attend and participate in every course session and to complete and upload all assignments before the deadlines documented in the Course Schedule.
- I will deduct one letter grade for late postings and assignments, and no credit will be assigned for postings or assignments turned in more than one week late.
- No written work will be accepted for grading after 11:59 p.m. PT on the last day of classes (i.e. Friday, August 13th, 2021).

**Assignment Submission Policy**

You will submit assignments for grading via Blackboard using the due dates specified in the Course Schedule below.

**Additional Policies**

**Communications** – This is a remote learning course, so most of our interactions will be asynchronous (not at the same time). All submissions will be shared with me 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 likely 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.

Workload – 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

<table>
<thead>
<tr>
<th>Week 1 5/20*</th>
<th>Topics/Daily Activities</th>
<th>Readings and Homework</th>
<th>Deliverables/ Due Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Class starts on Thursday, 5/20</td>
<td>Introduction: Introduction to the course and the ways in which the various topics and tasks will be woven together</td>
<td>Tomlinson (2015) Dangermond &amp; Goodchild (2020)</td>
<td>Submit Exercise #1 no later than 11:59 p.m. on Tuesday, 5/25</td>
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</tbody>
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| Week 2 5/24 | US Geospatial Services Industry: A first look at the geospatial value proposition and the various ways in which geospatial information may add value to human activities | Boston Consulting Group (2012) FGDC (2020) NGAC (2015) | Submit Reflection #1 no later than 11:59 p.m. on Tuesday, 6/1 |

| Week 3 6/1* | Economic Impact of Geospatial Services: A second take on the same topics – this time through reports from Australia, the UK, and Google compliments of a report on the global economic impact of geographic information services prepared by Oxera | Oxera (2013) AlphaBeta (2016) ODI (2018) | Submit Reflection #2 no later than 11:59 p.m. on Tuesday, 6/8 |

| *Monday, 5/31 is a university holiday | | | |

| Week 4 6/7 | The Art of Leadership: A first look at the art of leadership through the eyes of Steven B. Sample, the 10th president of USC | Sample (2003) | Submit Reflection #3 no later than 11:59 p.m. on Tuesday, 6/15 |
| Week 5 | Leadership Fundamentals – The Organizational Context: | | Submit Reflection #4 no later than 11:59 p.m. on Tuesday, 6/22 |
| 6/14 | We will use the Kurtzman and U.S. Department of the Army texts to 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 |

| Week 6 | Leadership Fundamentals – Role of Teamwork: | | Submit Exercise #2 no later than 11:59 p.m. on Tuesday, 6/29 |
| 6/21 | 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 |

| Week 7 | Leadership Fundamentals – How to Lead: | | Submit Reflection #5 no later than 11:59 p.m. on Tuesday, 7/6 |
| 6/28 | 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 |

| Week 8 | Leadership Fundamentals – Why Ideas Matter: | | Submit Reflection #6 no later than 11:59 p.m. on Tuesday, 7/13 |
| 7/6* | *Monday, 7/5 is a university holiday | Kurtzman, Ch. 13 | |

| Week 9 | Leadership Fundamentals – Getting Up Close with Geospatial Leaders: | | Submit Reflection #7 no later than 11:59 p.m. on Tuesday, 7/20 |
| 7/12 | We will start with a couple of texts on leadership and then shift our attention to some of geospatial leaders participating in the 2021 Esri User Conference | McCall (1997) Selected Blog Posts | |

| Week 10 | GIS and Science Frontiers: | | Submit Exercise #3 and Reflection #8 no later than 11:59 p.m. on Tuesday, 7/27 |
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, policy.usc.edu/scientific-misconduct.

Support Systems

Counseling and Mental Health– (213) 740-9355 – 24/7 on call
engemannshc.usc.edu/counseling
Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

National Suicide Prevention Lifeline – 1 (800) 273-8255 – 24/7 on call
www.suicidepreventionlifeline.org
Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

Relationship and Sexual Violence Prevention Services (RSVP) – (213) 740-9355(WELL), press “0” after hours – 24/7 on call
studenthealth.usc.edu/sexual-assault
Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

Office of Equity and Diversity (OED) – (213) 740-5086 | Title IX Compliance – (213) 821-8298
equity.usc.edu, titleix.usc.edu
Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

Reporting Incidents of Bias or Harassment– (213) 740-5086 or (213) 821-8298
usc-advocate.symplicity.com/care_report
Avenue to report incidents of bias, hate crimes, and microaggressions to the Office of Equity and Diversity | Title IX for appropriate investigation, supportive measures, and response.

The Office of Disability Services and Programs – (213) 740-0776
dsp.usc.edu
Support and accommodations for students with disabilities. Services include assistance in providing readers/notetakers/interpreters, special accommodations for test taking needs, assistance with architectural barriers, assistive technology, and support for individual needs.

USC Campus Support and Intervention – (213) 821-4710
campussupport.usc.edu
Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Diversity at USC – (213) 740-2101
diversity.usc.edu
Information on events, programs and training, the Provost’s Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call
dps.usc.edu, emergency.usc.edu
Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

USC Department of Public Safety – - UPC: (213) 740-6000, HSC: (323) 442-120 – 24/7 on call
dps.usc.edu
Non-emergency assistance or information.
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. All registered students can access electronic library resources through the link https://libraries.usc.edu/. In addition, the USC Libraries have many important resources available for distance students through the link: https://libraries.usc.edu/faculty-students/distance-learners. These include instructional videos, remote access to university resources, and other key contact information for distance students.