SSCI 313, Global Geodesign and Stakeholder Engagement

Syllabus

Units: 2

Term Day Time: Fall 2022, Wednesday, 9:00 - 10:50 a.m.

Location: KAP 147

Instructor: Guoping Huang, D.Des.
Office: AHF B57B
Office Hours: Wednesday 1:00 – 3:00 pm or by appointment via email.
Contact Info: guopingh@usc.edu, 213-740-5192 (zoom phone), see contact page on Blackboard for Zoom Room

Library Help: Andy Rutkowski
Office: VKC 36B
Office Hours: Thu 10 a.m.-12 p.m.
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IT Help: Dornsife Technology Services
Office: SHS 260
Contact Info: spatial_support@usc.edu, 213-740-2775

Course Description

This course introduces the concept, practice, and context of public engagement, and its importance to the geodesign process. The topics in the first part of the course will cover the fundamental concepts of public participation and its advantages, the key elements in a public engagement process including organizing, managing, and integrating science, the context of public engagement including possible issues, the stakeholders, and the participation process. The second part of the course integrates the foundations that have been introduced in the first part of the course with the geodesign process and discusses the applications of public engagement in real-world projects.

Public engagement serves as the vehicle to democratize the decision-making process. In fact, two of the characteristics of geodesign are its emphasis on the people of the place and public participation. The form of participation varies depends on the location, the stakeholders, and the scale of the project. This course invites guest lectures from other countries to expose students to more diversified forms of public participation in different sociopolitical settings. The course will conclude with an examination of the knowledge gathered from public participation and its applications in geodesign.

Learning Objectives

Upon successful completion of this course, a student will be able to:

- Identify key stakeholders
- Describe the key elements of public engagement;
- Describe the process of public engagement;
- Evaluate the aspects that contribute to the success of a public engagement process;
- Recognize and prepare for the potential issues that may be raised from the public engagement process;
- Identify the importance of public engagement in geodesign;
- Relate and compare public engagement processes under different sociopolitical settings; and
- Design and develop a public engagement process.

Students may vary in their competency levels on these abilities. You can expect to acquire these abilities only if you honor all course policies, attend classes regularly, complete all assigned work in good faith and on time, and meet all other course expectations of you as a student.

Prerequisite(s): None
Co-Requisite(s): None
Recommended: SSCI 201: Principles of Geodesign

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).

COVID-19 policy -- Students are expected to comply with all aspects of USC's COVID-19 policy including, but not limited to, vaccination, indoor mask mandate, and daily TrojanCheck. Failure to do so may result in removal from the class and referral to Student Judicial Affairs and Community Standards. Students are recommended to keep safe physical distancing, whenever possible, to prevent any possible transmission. Please contact your instructor if you have any safety concerns.

Diversity and Inclusion – It is my intent that students from all diverse backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful to everyone, and you are also expected to respect of others regardless of their race, ethnicity, gender identity and expressions, cultural beliefs, religion, sexual orientation, national origin, age, abilities, ideas and perspectives, or socioeconomic status. Your suggestions are encouraged and appreciated. Feel free to let me know ways to improve the effectiveness of the course for you personally or for other students.

Required Readings and Supplementary Materials

All of the readings listed below are available online through USC Libraries or under the tab marked "Readings" on the course Blackboard.

Textbook:

- Stern, P. C., & T. Dietz. 2008. *Public participation in environmental assessment and decision making.* Washington, DC: National Academies Press (available at https://ebookcentral.proquest.com)

Supplemental materials:

- Aguirre, R., T. Nyerges. (2014). An agent-based model of public participation in sustainability management. *Journal of Artificial Societies and Social Simulation,* 17(1), 7.

- Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Planning Association,* 35(4), 216-224.

- Carpentier, N. (2016). Beyond the ladder of participation: An analytical toolkit for the critical analysis of participatory media processes. *Javnost – The Public,* 23(1), 70–88.

- Cooper, C., W. Hochachka, A. Dhondt. (2012). The opportunities and challenges of citizen science as a tool for ecological research. In R. Bonney and J. Dickinson (Eds.), *Citizen science: Public participation in environmental research* (pp. 99-113). Ithaca, NY: Cornell University Press.

- Elmerghany, A. H., G. Paulus. (2017). Using Minecraft as a geodesign tool for encouraging public participation in urban planning. *GI_Forum,* 1, 300–314.

- Foster, K. (2016). Geodesign parsed: Placing it within the rubric of recognized design theories. *Landscape and Urban Planning,* 156, 92–100.

- Louv, R., J. Fitzpatrick. (2012). Overview of citizen science. In R. Bonney and J. Dickinson (Eds.), *Citizen science: Public participation in environmental research* (pp. 19-26). Ithaca, NY: Cornell University Press.

- McElvaney, L., Foster, K. (2014). Enhancing Stakeholder Engagement: Understanding Organizational Change Principles for Geodesign Professionals. In: Lee, D., Dias, E., Scholten, H. (eds) *Geodesign by Integrating Design and Geospatial Sciences*. GeoJournal Library(), vol 111. Springer, Cham. https://doi.org/10.1007/978-3-319-08299-8_20

- Morgan, D.R., Pelissero, J.P., England, R.E. (1979). Urban Planning: Using a Delphi as a Decision-Making Aid, *Public Administration Review*, Vol. 39, No. 4, pp. 380-384 https://doi.org/10.2307/976215

- Newman, G., Wiggins, A., Crall, A., Graham, E., Newman, S., & Crowston, K. (2012). The future of citizen science: emerging technologies and shifting paradigms. *Frontiers in Ecology and the Environment*, 10(6), 298-304.

- Rivero, R., A. Smith, H. Ballal, C. Steinitz. (2015). Promoting collaborative geodesign in a multidisciplinary and multiscale environment: Coastal Georgia 2050, USA. In *Proceedings of the 15th International Conference on Information Technology in Landscape Architecture, Zurich, Switzerland.*

- Rotman, D., Hammock, J., Preece, J., Hansen, D., Boston, C., Bowser, A., & He, Y. (2014). Motivations affecting initial and long-term participation in citizen science projects in three countries. *iConference 2014 Proceedings*.

- Webler, T., S. Tuler. (2006). Four perspectives on public participation process in environmental assessment and decision making: Combined results from 10 case studies. *Policy Studies Journal,* 34(4), 699-722.

- Webler, T., S. Tuler, R. O. B. Krueger. (2001). What is a good public participation process? Five perspectives from the public. *Environmental Management,* 27(3), 435-450.

Description and Valuation of Assessments

This course includes a diversity of assessments that allow students to show their mastery of the material in a variety of ways. The different types of assessments are described below and their point value to final grades are listed in the following Grading Breakdown section.

Projects

A set of four projects is spread across the semester. The "hands-on" tasks that comprise these projects will introduce the tools of scientific inquiry and give students practical experience in implementing these tools within the framework of the scientific methods and typical geodesign settings. The projects are linked to the lectures and class discussions, but do not duplicate the lecture experience.

The geographic analysis and mapping software and geospatial data required for the homework packets will be accessed using virtual computing resources provided by the Spatial Sciences Institute.

Final Exam and Other Policies

The final exam is closed book. This exam will cover content learned during lecture as well as in the course readings and projects.

No make-up opportunities will be offered for the final exam, so mark the appropriate date on your calendar! If you have a legitimate conflict, per the USC policy on Final Exam Scheduling, speak with me as soon as possible. In addition, please note that there is **no credit for late assignments.**

Grading Breakdown

The table below shows the breakdown of the assessments and their weight in the final grade. The emphasis is on regularly completing a number of projects as well as solid performance on the final examination.

Assessment	Number	Points Each	Total Points (% of Grade)
Projects	4	20-25	80
Final Exam	1	20	20
Totals	5	--	100

Schedule

Date	Topics	Readings	Deliverables/Due Dates
Module 1 | Introduction and Technocracy			
Week 1			
8/24	Introduction Defining stakeholders and public participation	McElvaney and Forster (2014) Stern & Dietz (2008), Ch. 1 Arnstein & Sherry (1969)	
Week 2			
8/31	Decision-making and Delphi	Morgan et al. (1979) Cuhls (2002)	
Week 3			
9/7	Geodesign and Spatial Delphi	Vargas-Moreno (2008)	
Module 2 | The Practice of Public Participation			
Week 4			
9/14	The Promise and Perils of Participation	Stern & Dietz (2008), Ch. 2 Carpentier (2016)Stern & Dietz (2008), Ch. 3	**Project #1**
Week 5			
9/21	Public Participation Practice: Management Practices	Stern, P.C. & Dietz, T. (2008), Ch. 4	**Project #1**
Week 6			
9/28	Practice: Organizing Participation	Stern, P.C. & Dietz, T. (2008), Ch. 5	**Project #1**
Week 7			
10/5	Practice: Integrating Science	Stern & Dietz (2008), Ch. 6	**Project #2**
Week 8			

10/12	Context	Stern & Dietz (2008), Ch. 7 & 8	**Project #2**
Week 9			
10/19	Context: The Process	Webler & Tuler (2006) Webler et al. (2001)	**Project #2**
Module 3 | The Practice of Citizen Science in Geodesign			
Week 10			
10/26	Citizen Science and Its Applications and Impact	Louv & Fitzpatrick (2012) Cooper et al. (2012)	**Project #3**
Week 11			
11/2	Citizen Science and Geodesign at Different Scales	Aguirre & Nyerges (2014) Rivero et al. (2015)	**Project #3**
Week 12			
11/9	Citizen Science and Geodesign at Different Regions	Rotman et al. (2014)	**Project #3**
Module 4 | The Immerging Trend in the Practice of Citizen Science			
Week 13			
11/16	Public Participation with Technologies	Elmerghany & Paulus (2017)	**Project #4**
Week 14			
11/23*	*No Class – University Holiday	Newman et al. (2012)	**Project #4**
Week 15			
11/30	Future of Public Participation	Stern & Dietz (2008), Ch. 9	**Project #4**
Final Examination (Date and Time TBD; Location TBD; Closed Book)			

Technological and Communication Requirements

ArcGIS and other mapping programs are provided online via the SSI Server; hence, you do not need to install it on your own computer. Instead, every student must have the following technology requirements:

- A computer with a fast Internet connection.
- A functional webcam and a microphone for use whenever a presentation or meeting is scheduled.
- An up-to-date web browser to access the Server

If a student does not have access to any of these, please speak with the instructor at the start of the semester. Also, see the USC ITS Student Toolkit here: https://keepteaching.usc.edu/students/student-toolkit/

SSI Server and Tech Support – This course utilizes the SSI Server which is a virtual desktop giving access to many different professional software. If you are unable to connect to the server or experience any type of technical issues, send an email using your USC account to SSI Tech Support at spatial_support@usc.edu, making sure to copy (cc) me on the email.

Communications – All materials to be handed in will be submitted via Blackboard. 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.

I will send via email through Blackboard any notices that are time sensitive. Please be sure that you read as soon as possible all email sent from Blackboard or from me. Do not ignore course email until the day before assignments are due. Also double check to be sure that email sent from the USC blackboard account does not go into your junk mail!

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

Discussion forums – On the Blackboard site, I will post a series of discussion threads relevant to various sections of the course. Discussions provide a key means for student-to-student discussion and collaboration that can replicate the face-to-face contact you may have experienced in traditional classrooms. Here students can provide support to each other while working on your assignments, sharing hints and helpful tips, as you would in a classroom laboratory. Please post your questions about assignments there, as you would ask them publically in the classroom. I monitor the discussion threads and offer comments when necessary, but more importantly, consider the discussion board a key way to connect with your classmates and share your discoveries.

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 Research and Scholarship Misconduct.

Students and Disability Accommodations

USC welcomes students with disabilities into all of the University's educational programs. The Office of Student Accessibility Services (OSAS) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at osas.usc.edu. You may contact OSAS at (213) 740-0776 or via email at osasfrontdesk@usc.edu

Support Systems

Counseling and Mental Health - (213) 740-9355 – 24/7 on call
studenthealth.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
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 for Equity, Equal Opportunity, and Title IX (EEO-TIX) - (213) 740-5086
eeotix.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 for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

The Office of Student Accessibility Services (OSAS) - (213) 740-0776
osas.usc.edu
OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

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, Equity, and Inclusion - (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.

Office of the Ombuds - (213) 821-9556 (UPC) / (323-442-0382 (HSC)
ombuds.usc.edu
A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

*Occupational Therapy Faculty Practice - (323) 442-33*40 or otfp@med.usc.edu
chan.usc.edu/otfp
Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.

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: 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.