

SSCI 313, Global Geodesign and Stakeholder Engagement

Syllabus

Units: 2

Term Day Time: Fall 2025, Wednesday, 9:00 - 10:50 a.m.

Location: THH203

Instructor: Guoping Huang, D.Des.

Office: AHF B57B

Office Hours: Thursday 9:00 – 11:00 am 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: LIPA B40-A

Office Hours: Thu 10:00 a.m.-12:00 p.m.

Contact Info: arutkows@usc.edu, see contact page on

Blackboard for Zoom Room

IT Help: SSI IT Support

Office: By appointment via email

Contact Info: spatial-support@usc.edu

Course Description

This course introduces the concepts and methods of stakeholder engagement, and its importance to the geodesign process. The topics in the first part of the course will cover the fundamental concepts of stakeholder engagement, the key elements in the process, public participation, integrating science, etc. Hands-on workshops are included in the first part to introduce important practical methods. The second part of the course integrates the foundations that have been introduced in the first part of the course with the geodesign framework and introduces methods for spatial negotiation among stakeholders.

Public participation is one important component of stakeholder engagement. It 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 presents guest lectures from other countries to expose students to more diversified forms of public participation in different sociopolitical settings.

The course will conclude with a real-world project in Penghu, Taiwan. In recent years, there has been tension between the local government who is seeking investment in offshore wind farm and the local residents, especially fishermen, who are trying to protect their traditional fishing areas. Students are expected to work with their peers in Taiwan to development tools and materials for stakeholder engagement and public participation within the geodesign framework.

Learning Objectives

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

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

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).

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.

Course Structure

The main theoretical concepts are provided through lectures and readings. The course will generally unfold on a weekly basis. Assignments allow students to demonstrate their understanding of concepts and ability to apply spatial analytical tools in an appropriate, informed manner.

Workload – This is a two-credit, one semester course. Students should expect to spend 4-8 hours per week completing the work in this course.

Technological and Communication Requirements

ArcGIS is provided online via the GIST 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/

A limited number of computers with all the necessary software is available in the SSI Suite (AHF B55) during regular business hours, Monday through Friday 9 am to 5 pm. To reserve a computer, please use this link https://calendly.com/usc-ssi/the-ssi-suite-ahf-b55-student-computers-1. These computers are available to any student in an SSCI or GSEC course and can be used as a resource if you experience difficulties in accessing the SSI server or using the GIS software on your personal computer.

Brightspace – This course will utilize the Brightspace learning management system which allows students to access course content, upload assignments, participate in discussion forms, among other learning experiences. The Brightspace platform provides flexibility in the learning experience where students can participate in the course residentially or remotely, synchronously (meeting together at the same time) or asynchronously (accessing videos and course content outside of class).

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 support@usc.edu, making sure to copy (cc) me on the email.

Communications – All assignments given and all materials to be handed in will be submitted via Brightspace. The instructor will also create and monitor discussion forums through which students can discuss issues and assignments as needed. Students should read all email sent from Brightspace or from course instructor(s) as soon as possible. Also, students who do not regularly use their USC email accounts should double-check to be sure that mail sent from both the Brightspace accounts and the instructor's account (noted above) to your USC account is forwarded to an address used regularly and does not go into junk mail. The instructor will endeavor to respond to all email within 24 hours of receipt, aiming for no more than 72 hours delay. In the rare case that an instructor is off-line for an extended periodof time, an announcement will be posted to the class Brightspace site. Due to the synchronous and asynchronous nature of this course, it is each student's responsibility to stay informed and connected with others in our course. In addition to email, students are expected to login to Brightspace regularly to check for announcements.

Discussion forums – On the Brightspace 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 publicly 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.

Required Readings and Supplementary Materials

The required textbook for this course is:

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

Supplementary readings will be assigned from various sources including:

- 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.
- Balram, S., Dragicevic, S., & Meredith, T. (2003). Achieving effectiveness in stakeholder participation using the gis-based collaborative spatial delphi methodology. *Journal of Environmental Assessment Policy and Management*, 5(3), 365–394. https://doi.org/10.1142/S1464333203001413
- Calleo, Y., Di Zio, S., & Pilla, F. (2023). Facilitating spatial consensus in complex future scenarios through Real-Time Spatial Delphi: A novel web-based open platform. Futures & Foresight Science, 5, e155. https://doi.org/10.1002/ffo2.155
- 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.
- Cuhls, K. (2023). The Delphi Method: An Introduction. In book: Delphi Methods In The Social And Health Sciences (pp.3-27) 10.1007/978-3-658-38862-1_1.
- Dandekar, H. (2019). The Planner's Use of Information. 3rd Edition. Routledge.
- 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.
- Huang, G. (2017). Protecting Urban River Views with Geodesign Approach. Journal of Digital Landscape Architecture, Vol. 2: 85-93, http://dx.doi.org/10.14627/537629009

- Huang, G., Zhou, N. (2016). Geodesign in Developing Countries: The example of the Master Plan for Wulingyuan National Scenic Area, China. Landscape and Urban Planning, Vol. 156: 81-91, https://doi.org/10.1016/j.landurbplan.2016.05.014
- 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.
- Steinitz, C. (1990). Toward a sustainable landscape with high visual preference and high ecological integrity: the loop road in Acadia National Park, U.S.A. *Landscape and Urban Planning*. Vol. 19, No. 3. https://doi.org/10.1016/0169-2046(90)90023-U
- 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.

Case study related readings:

- Chung, H. S. (2021). Taiwan's offshore wind energy policy: From policy dilemma to sustainable development. Sustainability, 13(18), 10465.
- Zhang, Y., Zhang, C., Chang, Y. C., Liu, W. H., & Zhang, Y. (2017). Offshore wind farm in marine spatial planning and the stakeholders engagement: Opportunities and challenges for Taiwan. Ocean & coastal management, 149, 69-80.

• Shiau, T. A., & Chuen-Yu, J. K. (2016). Developing an indicator system for measuring the social sustainability of offshore wind power farms. Sustainability, 8(5), 470.

Description and Assessment of Assignments

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 – 4 worth a total of 75 points. 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

Midterm Exam— 1 worth 15 points. The midterm 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 exam,** so mark the appropriate date on your calendar! If you have a legitimate conflict, per the USC policy on exam Scheduling, speak with me as soon as possible.

Public Meeting—1 worth 5 points. During the semester, students will be asked to attend one of the public meetings hosted by LA county of LA city planning department. Students are expected to write an assessment to document their experiences at the public meeting.

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 midterm examination.

Assessment	Number	Points Each	Total Points (% of Grade)
Projects	3	15	45
Public meeting	1	10	10
Final project	1	30	30
Midterm Exam	1	15	15
Totals	5		100

Grading Scale

Assignments in this and other SSCI courses, are graded on the letter grade scale where A is exemplary, B is very good, C is satisfactory, D is unsatisfactory, and F needs improvement. Final grades use the same letter grade scale with C being the minimum passing grade for credit at the graduate level. The grading scale follows:

Α	> 93 points	B-	80-82 points	D+	67-69 points
A-	90-92 points	C+	77-79 points	D	63-66 points
B+	87-89 points	С	73-76 points	D-	60-62 points
В	83-86 points	C-	70-72 points	F	<60 points

Assignment Submission Policy

Unless otherwise noted, assignments must be submitted via Brightspace by the due dates specified in the Course Schedule below and on the assignment instructions.

Unless otherwise noted, all Reading Assignments and Tutorials are *due by 11:59 pm Pacific Time* (PT) on Mondays. Your attention to on-time assignment submission is essential.

Strict penalties apply for late assignments as follows:

- All assignments will be penalized 2 points up to FOUR days late. No points will be given for submissions more than FOUR days late. Note that all assignments worth 2 points will receive 0 points if submitted late.
- Additionally, no written work will be accepted for grading after 5 pm PT on the last day
 of classes.

Grading Timeline

My goal is to provide grading and feedback on each course assignment no later than one week after the assignment was submitted.

Course Content Distribution and Synchronous Session Recordings Policies

USC has policies that prohibit recording and distribution of any synchronous and asynchronous course content outside of the learning environment.

Recording a university class without the express permission of the instructor and announcement to the class, or unless conducted pursuant to an Office of Accessibility Services (OSAS) accommodation. Recording can inhibit free discussion in the future, and thus infringe on the academic freedom of other students as well as the instructor. (<u>Living our Unifying Values:</u> The USC Student Handbook, page 13).

Distribution or use of notes, recordings, exams, or other intellectual property, based on university classes or lectures without the express permission of the instructor for purposed other than individual or group study is prohibited. This includes but is not limited to providing materials for distribution by services publishing course materials. This restriction on unauthorized use also applies to all information, which has been distributed to students or in

any way has been displayed for use in relationship to the class, whether obtained in class, via email, on the internet, or via any other media. (<u>Living our Unifying Values: The USC Student Handbook</u>, page 13).

Learning Experience Evaluations

Please note Learning Experience Evaluations for the course take place at the end of the semester and are facilitated by the University. These evaluations provide an important review of student experiences in the course.

Schedule

Date	Topics	Readings	Deliverables/Due Dates	
Week 1 8/27	Introduction	McElvaney and Forster (2014)		
	Defining stakeholders	Forster (2016)		
	Defining Stakeholders	Stern & Dietz (2008), Ch. 1 Arnstein & Sherry (1969)		
Week 2 9/3		Stern & Dietz (2008), Ch. 2 &3		
*Monday, 9/1 is university holiday	Decision-making and Public participation	Stern & Dietz (2008), Ch. 4 &5 (optional)	Project #1	
(Labor Day)		Carpentier (2016)		
Week 3	Stakeholder	Morgan et al. (1979)		
9/10	engagement and Delphi	Cuhls, K. (2023)	Project #1	
Week 4 9/17	Spatial Delphi	Calleo et al. (2023) Balram et al. (2003)	Public meeting	
Week 5 9/24	Integrating science	Stern & Dietz (2008), Ch. 6	Public meeting	
Week 6 10/1		Louv & Fitzpatrick (2012)		
10/1	Integrating citizen	Cooper et al. (2012)		
	science	Aguirre & Nyerges (2014)		
		Rivero et al. (2015)		

		Newman (2012)	
		Rotman et al. (2014)	
Mad. 7		Notifiali et al. (2014)	
Week 7 10/8			
*10/9-10/10 is university holiday (Fall Recess)	Midterm Exam		
Week 8		Chung, H. S. (2021)	
10/15	Introduction of the case of offshore wind farm	Zhang, Y., Zhang, C., Chang, Y. C., Liu, W. H., & Zhang, Y. (2017)	Project #2
	By Chun-Pei LIAO	Shiau, T. A., & Chuen-Yu, J. K. (2016)	
Week 9 10/22	Survey and Questionnaire: Introduction to Survey123	Dandekar (2019), Chapter 1&2	Project #2
Week 10 10/29	Survey and Questionnaire: Photographic survey	Dandekar (2019), Chapter 1&2 Steinitz (1990) Huang (2017)	Project #3
Week 11 11/5	Spatial negotiation with GIS		Project #3
Week 12 11/12 *Monday, 11/10 is university holiday (Veterans Day)	Spatial negotiation and decision-making	Huang (2016)	Final project
Week 13 11/19	Workshop: spatial negotiation and decision-making		Final project

Week 14 11/26 *11/26-11/28 is a university holiday (Thanksgiving)	*No Class – University Holiday		
Week 15 12/3 Friday, 12/5 is the last day of class, 12/6-12/9 study days	Final presentation The future of stakeholder engagement		
Final Report Due (TBD)			

Statement on Academic Conduct and Support Systems

Academic Integrity

The University of Southern California is a learning community committed to developing successful scholars and researchers dedicated to the pursuit of knowledge and the dissemination of ideas. Academic misconduct, which includes any act of dishonesty in the production or submission of academic work, comprises the integrity of the person who commits the act and can impugn the perceived integrity of the entire university community. It stands in opposition to the university's mission to research, educate, and contribute productively to our community and the world.

All students are expected to submit assignments that represent their own original work, and that have been prepared specifically for the course or section for which they have been submitted. You may not submit work written by others or "recycle" work prepared for other courses without obtaining written permission from the instructor(s).

Other violations of academic integrity include, but are not limited to, cheating, plagiarism, fabrication (e.g., falsifying data), collusion, knowingly assisting others in acts of academic dishonesty, and any act that gains or is intended to gain an unfair academic advantage.

The impact of academic dishonesty is far-reaching and is considered a serious offense against the university. All incidences of academic misconduct will be reported to the Office of Academic Integrity and could result in outcomes such as failure on the assignment, failure in the course, suspension, or even expulsion from the university.

For more information about academic integrity see <u>the student handbook</u> or the <u>Office of Academic Integrity</u>'s website, and university policies on Research and Scholarship Misconduct.

Please ask your instructor if you are unsure what constitutes unauthorized assistance on an exam or assignment, or what information requires citation and/or attribution.

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 osas.usc.edu.

Support Systems:

Counseling and Mental Health - (213) 740-9355 - 24/7 on call

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

<u>988 Suicide and Crisis Lifeline</u> - 988 for both calls and text messages – 24/7 on call

The 988 Suicide and Crisis Lifeline (formerly known as the National Suicide Prevention Lifeline) provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week, across the United States. The Lifeline is comprised of a national network of over 200 local crisis centers, combining custom local care and resources with national standards and best practices. The new, shorter phone number makes it easier for people to remember and access mental health crisis services (though the previous 1 (800) 273-8255 number will continue to function indefinitely) and represents a continued commitment to those in crisis.

<u>Relationship and Sexual Violence Prevention Services (RSVP)</u> - (213) 740-9355(WELL) – 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to genderand power-based harm (including sexual assault, intimate partner violence, and stalking).

Office for Equity, Equal Opportunity, and Title IX (EEO-TIX) - (213) 740-5086

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

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 ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

<u>USC Campus Support and Intervention</u> - (213) 740-0411

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Culture Journey - (213) 740-2101

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.

<u>USC Emergency</u> - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call

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.

<u>USC Department of Public Safety</u> - UPC: (213) 740-6000, HSC: (323) 442-1200 – 24/7 on call Non-emergency assistance or information.

Office of the Ombuds - (213) 821-9556 (UPC) / (323-442-0382 (HSC)

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) 442-2850 or otfp@med.usc.edu

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 Brightspace page and the SSI Student Hub on Brightspace 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.