

## **SSCI 350: International GeoDesign**

**Units:** 4

**Term — Day — Time:** Maymester 2023; May 16 – June 15, 2023

**Location:** Turenscape Academy in Xixinan Village, Anhui Province, China

**Instructor:** Guoping Huang, D.Des.

**Office:** AHF B57B

**Regular Office Hours:** Wed 1:00-3:00 p.m. P.T. Also available by appointment.

**Contact Info:** [guopingh@usc.edu](mailto:guopingh@usc.edu), (213) 740-5192

**Library Help:** Andy Rutkowski

**Office:** VKC B36B

**Hours of Service:** Tuesdays, 10:00 a.m.-12:00 noon;

Thursdays 4:30-5:30 p.m., or other times by appointment

**Contact Info:** [arutkows@usc.edu](mailto:arutkows@usc.edu), 213-740-6390 (office)

**IT Help**

**Hours of Service:** Mondays to Fridays, 9:00 a.m.-5:00 p.m.

**Contact Info:** [spatial\\_support@usc.edu](mailto:spatial_support@usc.edu), 213-740-2775

## Course Scope and Purpose

The goal of this course is to introduce students to the critical and spatial thinking skills of Geodesign while engaged in both classroom and field settings. Additionally, this course will enable students to apply these skills in a final Geodesign project that proposes design and planning strategies to address societal and environmental challenges in the real world.

Geodesign is a forward-thinking, interdisciplinary framework that combines planning, design, and environmental systems management with geospatial technologies to explore ways to build a better world. As interest and demand for sustainable development gain traction nationally, internationally, and across the University of Southern California (USC) campus, the use of Geodesign principles is becoming increasingly valuable to address global challenges and foster healthy human- environment relationship at different scales.

Students initially will work on the USC campus (and/or remotely if quarantine is still required to enter China after international travel) to understand the core concepts of Geodesign, sustainable development, people and place, urban and landscape planning, and geospatial technologies. During the following two weeks, students will stay at the Turenscape Academy ([website](#)) in the picturesque village of Xixinan in rural Anhui Province, China. The Turenscape Academy is a world-class institution founded by Prof. Kongjian Yu, an international honorary fellow of the American Academy of Arts and Sciences, to promote critical thinking among the new generation of designers and planners. Students will learn from and work with the interdisciplinary faculty, visiting scholars and practitioners at the Academy to develop rural planning projects that aim to achieve UN's Sustainable Development Goals. Excursions to nearby UNESCO world heritage sites including Hongcun and Huangshan are included in the program. After three days of independent travels, students are expected to regroup and wrap up the program in the bustling city of Shanghai where they will visit Tongji University to present their Geodesign projects as well as their findings and reflections.

### ***Learning Objectives***

On completion of this course, students should be able to:

- Explain representative challenges of population growth, increasing urbanization and globalization, resource and land management, the widening gap between rich and poor, and the likely impacts of climate change across a variety of urban and landscape settings;
- Describe the ways in which these challenges have been addressed in exemplar settings;
- Identify and compare successes and challenges in addressing these issues across in developed countries and developing countries;
- Investigate the relationship between human and natural systems in theoretical and practical terms, and categorize how and why people transform natural environments into residential, commercial, and/or industrial uses, including the

impacts these decisions have on environmental vitality, economic sustainability, and human well-being.

- Produce a specific geodesign plan for Xixinan, based on research and geodesign principles.

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

**Concurrent Enrollment:** None

**Recommended Preparation:** None

## **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](mailto: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.

## Course Organization

This course is a 5-week intensive living and learning experience comprised of lecture sessions, hands-on workshops, paired with an experiential learning component. The lecture sessions will utilize readings, discussions, presentations, and videos to introduce core concepts of Geodesign which include urban and landscape planning, land management, human-environment interactions, and geospatial technologies, among other topics. Workshops are tailored to teach students operational skills to work with geospatial data and technologies. The field experience will consist of a three-week (or more depending on the quarantine policy) study abroad where the class will engage applications and the theory of Geodesign through guest lectures, field excursions, exploratory analysis, and an applied Geodesign final project. The Geodesign project will be organized and completed with local stakeholders and colleagues. The focus will be to draft a sustainable development plan to address the demand for growth while preserving the characteristics and ecological functions of rural landscapes.

## Technological Proficiency and Hardware/Software Required

Students do not need to have prior experience with GIS software. The GIS software and geospatial data required for course assignments will be accessed using computing resources provided by the Spatial Sciences Institute.

*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 Tech Support at [spatial\\_support@usc.edu](mailto:spatial_support@usc.edu), making sure to copy (cc) your instructor on the email.

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://keepsteaching.usc.edu/students/student-toolkit/>

## Required Readings and Supplementary Materials

- Lee, D., E. Dias, and H. J. Scholten 2014. *Geodesign by Integrating Design and Geospatial Sciences*. Switzerland, Springer. (selected chapters)
- Miller W. 2012. *Introducing GeoDesign: The Concept*. Redlands, CA, Esri Press.\*
- Ruddell, D. and K. Foster. 2018. *GIS&T and Geodesign*. The Geographic Information Science & Technology Body of Knowledge (3<sup>rd</sup> Quarter 2018 Edition), J.P. Wilson (ed) DOI: 10.22224/gistbok/2018.3.3.
- Additional readings will be posted to Blackboard as needed in preparation for the case study.

\*Denotes text will be posted on Blackboard

## Description and Assessment of Assignments

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

Reading Assignments (16 points): You will complete four assignments on readings that inform Geodesign by providing 1-2 page reflections on the concepts, principles, and/or case studies covered in the readings.

Oral Presentation – topic proposal (10 points): You will prepare and deliver a 10-15 minute oral presentation accompanied by slides (ppt, story map, or other media is accepted) proposing a topic of interest to investigate for your Geodesign project.

Field Activities (15 points): You will be required to participate in all activities for the course, each weekday (Mon – Fri) of the field experience.

Field Research (15 points): You will pick a research topic and complete your research and analysis during the field activities. The research work will culminate in a short presentation and a short research paper (2 pages).

Field Experience Story Map (14 points): You will create and present an online Story Map that illustrates activities, observations, reflections, and key locations of the field experience.

Final Geodesign Project (30 points): You will produce a rural development and conservation plan including maps and project report with your teammates. You will deliver a final oral presentation on the plan that integrates Geodesign concepts and your research.

## Grading Breakdown

Assignment	# of Assignments	Total Points
Reading Assignments	4	16
Oral presentation – topic proposal	1	10
Field Activities	10	15
Field Research	1	15
Field Experience Story Map	1	14
Final Geodesign Project	1	30
<b>TOTAL</b>	<b>18</b>	<b>100</b>

## Assignment Submission Policy

Assignments will be submitted for grading via Blackboard using the due dates specified in the Course Schedule below. Late work will be assessed a penalty of 10% per day and zero grades will be assigned for work that is more than one week late. No work will be accepted for grading after 5 pm PT on the last day of the Maymester session.

## Additional Policies

Students are expected to attend and participate in a mandatory orientation session on UPC campus, every class session, and to complete and upload all assignments before the deadlines detailed in the Course Schedule.

The anticipated number of contact hours between instructor and student for this course, including field experience, is 70 hours. Course meetings at USC (and/or quarantine hotel) comprise 18 hours (9 two-hour sessions); the field experience counts for 52 hours.

## Schedule

	Topic	Readings and Assignments	Deliverables/Due Dates
<b>Meeting 1</b> February 2023	<b>Initial Meeting: Course Introduction</b> An initial meeting will be held the first week of February to introduce the course topics and semester expectations.		No deliverables
<b>Week 1</b> 5/16	If quarantine is required, both week 1 and week 2 will be in a quarantine hotel. <b>Module 1: Core Concepts of Geodesign:</b> Students will be introduced to core concepts of geodesign and the international case study through a combination of lectures, readings, discussions, and hands-on activities.	Miller (2012); Ruddell and Foster (2018);	Complete by Friday 5/19: Reading Assignment 1; Reading Assignment 2; Oral Presentation
<b>Week 2</b> 5/22	<b>Module 2: Skill-building and Self-directed Research</b> The second week of class is for students to complete and reflect upon course readings, and acquire essential skills to work with geospatial data and geospatial technologies. Work tasks for Module 2 will be completed independently and can be accomplished from home or while traveling abroad.	Lee, Dias, and Scholten (2014) and selected readings	Complete by Friday 5/26: Reading Assignment 3; Reading Assignment 4
<b>Weeks 3 &amp; 4</b> 5/29-6/9	<b>Module 3: Field Experience</b>	Time spent during the field experience will involve: 1) Lectures, field trips, and field work; 2) Independent study time (est. 2 hrs/day); and 3) Personal/ recreation time.	
	<u>The following represents the tentative schedule of the field experience:</u>  <u>5/29: Train from Shanghai to Huangshan. Arrive at Turenscape Academy. Get settled</u>  <u>5/30: Tour of Xixinan</u>		

	Topic	Readings and Assignments	Deliverables/Due Dates
	<u>5/31- 6/2: Methods of field research</u> <u>6/3: Day trip to Huang Mountain</u> <u>6/5-6/9: Field research and plan-making</u> <u>6/10: Day trip to Hong Village</u>		
<b>Week 5</b> 6/12	<b>Module 4: Final project and Reflections on Geodesign</b> 6/11-13: Independent travel (Shanghai, or Hangzhou, or Nanjing) 6/14: Final Presentation at Tongji University 6/15: Fly back		Complete by Wednesday 6/14

## 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](http://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](http://osas.usc.edu). You may contact OSAS at (213) 740-0776 or via email at [osasfrontdesk@usc.edu](mailto:osasfrontdesk@usc.edu)

### *Support Systems*

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



[studenthealth.usc.edu/counseling](http://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](http://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](http://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](http://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.symlicity.com/care\\_report](http://usc-advocate.symlicity.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](http://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](http://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](http://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](http://dps.usc.edu), [emergency.usc.edu](http://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](https://dps.usc.edu)

Non-emergency assistance or information.

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

[ombuds.usc.edu](https://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) 442-3340 or [otfp@med.usc.edu](mailto:otfp@med.usc.edu)*

[chan.usc.edu/otfp](https://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.