

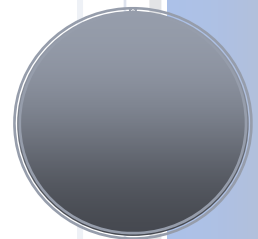
# MENTOR GUIDE

## USP SENIOR SEQUENCE RESEARCH TEAMS

This guide outlines tasks and responsibilities for those who have agreed to be a mentor for one of UCSD's Research Teams in the Urban Studies and Planning Program's Senior Sequence.

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## *USP SENIOR SEQUENCE STUDENT-MENTOR RESEARCH TEAMS*

### **USP Senior Sequence**

The Urban Studies and Planning (USP) Senior Sequence is a required set of classes (one in the fall, one in the winter) that all undergraduate majors must take their final year at UCSD. Each Senior Sequence student designs and conducts an original research project over a six-month period from September to March. The student's final product is a scholarly journal-length paper about 25 pages long. In addition to the paper, each student also puts their research project on display (using a scientific poster and video) during USP's annual Urban Expo open to the public mid-March every year. The students must also complete 100 hours of service learning in an internship placement of their choosing. The class web site can be viewed at <http://seniorsequence.net>.

Students in the Senior Sequence have historically focused their attention on one or more of the following ten Areas of Concentration (AOCs): Architecture and Urban Design; Community and Economic Development; Environment; Housing; Infrastructure and Public Facilities; Public Health, Safety and Welfare; Transportation; Tribal Policy and Planning; Urban-Regional Planning; and U.S.-Mexico Border Issues. Organizing the students into Research Teams provides additional structure beyond generic AOCs. Mentors—including invited faculty, researchers and other professionals—create the Research Teams in partnership with the student members.

### **Research Teams: A brief description**



A Research Team is a small group of students (2-4) working together with the instructor, TAs and mentors on a common theme. The purpose of the research teams is to: (a) provide a conceptual and institutional support framework for students wanting to create a knowledge-action collaborative, (b) make mentoring more efficient and (c) stimulate interdisciplinary thinking and action in a way that energizes scholarship of engagement. Teams can be structured in several ways that require varying degrees of commitment from the mentors.

Approximately 70-90 students enroll in the Senior Sequence Class every year. The formation of teams is optional. The number of teams that gets created is a function of student interests and our ability to get willing and able mentors.

### **Research Teams: student tasks and responsibilities**

The students that make up a particular team will work together to:

- Explore a common set of research interests (the team's overarching conceptual framework will be outlined by the students themselves in consult with the course instructor, mentor(s) and graduate teaching assistants (TAs).
- Support one another during the six-month Senior Sequence journey by providing encouragement and critical yet constructive feedback on class assignments – including proposal drafts, thesis, posters, and multimedia presentations.
- Collaborate where appropriate: finding/sharing contacts, reviewing literature, selecting methods, conceptualization, etc.
- Create a categorically organized list of readings, web sites, experts, ideas, questions, data, etc. useful for researchers in their domain of investigation (this effort will build on bibliographic and other resources already available on the class website)
- Contribute a collectively written section to the Sustainable City-Regions Reader (again, with input from the team's mentors).

### **Mentor Participation Levels and Activity**

Improving the quality of student research requires the assistance of community experts donating their time and knowledge to the program. These mentors include faculty, professionals from public and private sector organizations, non-profit executives, community-based and industry leaders, tribal elders, among others. They help guide the students but they do not have to do grading. Credit for the mentor's effort will be duly acknowledged in written and online venues.

The possible forms of involvement are described directly below, to be followed by detailed descriptions of what exactly each involve.

1. **Research Team Supporter:** A supporter is someone who cannot devote the time necessary to being a full-fledged mentor but would nonetheless like to participate. A supporter is someone who makes themselves available on a limited basis to students to answer questions about their field of expertise.
2. **Research Team Mentor/Co-Mentor:** Each research team, made up of between two to five students, needs the service of one or more mentors. How much commitment this entails is up to the mentor(s). At a minimum, the mentor must be willing and able to (a) meet with the students three times over the six months, and (b) provide feedback on the students written work, scientific poster, and/or video project (a short 3-5 minute piece that highlights the

results/significance of their research). The mentor might also elect to help the students write up their optional team narrative for the class Reader.

3. **Grand Challenge Author/Co-Author:** To energize student's investigative imagination, we have created a set of "grand challenges" (GC) (i.e., inspirational research-oriented overviews of significant trends and issues in the field of urban and regional planning). We rely upon mentors and experts to help compose the GC's narrative and associated resources for action research purposes.

### **Research Team Supporter**

The requirements for being a research team supporter are minimal. A research team supporter makes his or herself available for students who may have occasional questions about their research. For instance, a student may need advice on whom to interview and suggestions on where to find data. Basically, a supporter has a good grasp of the field in question and can point students in the right direction.

### **Research Team Mentor/Co-Mentor**

Research Teams can be organized in several different ways, which require different levels of commitment from their mentors. The approach that requires the most amount of work has the team focusing on collectively answering one major research question in a coordinated fashion –that is, each student's research project would contribute a piece to the larger puzzle. For instance, a mentor may propose a research question prompting students to compare the impacts of a development (as it actually happened on the ground) with those predicted earlier by an environmental impact report. One student could study traffic, another housing, etc. This approach has been most popular with mentors from non-profits or government agencies that are closely working with one community.

A looser approach to a research team is one in which each student has an entirely distinct project. Say for instance a group of students have a common interest in the field of transportation. They could form a research team with a joint interest in the field of transportation planning. One student might study the FasTrak lanes on the I-15, another might study a transit-oriented development in the South Bay and another the use of paratransit by those with disabilities. This approach wouldn't require as much coordination across the projects. The team's function is more one of mutual support (birds of a feather flocking together to cross pollinate ideas and share common resources).

Mentors are asked to:

- **Play a facilitators role** by providing intellectual guidance at the outset of the Senior Sequence. We especially appreciate it if they can contribute to the Grand Challenge webpage (described later).
- **Meet with the student Research Team** on three occasions over a six month period: once towards the beginning of the sequence (October), once at the beginning of winter quarter (January) and then at the end of the Senior Sequence (March). The students will be responsible for making these arrangements and will be expected to assemble at a meeting place most convenient to the mentor.
- Mentors can play an important role in the production of an annual end-of-the-sequence archive we publish called the ***Sustainable City-Regions Reader***, which contains the highlights of student’s individual and team-based research.

### **Grand Challenge Author/Co-Author Responsibilities**

Each Grand Challenge (GC) has a dedicated page on the class web site (GC database). The GCs are jointly written by mentors, various experts and the professor. The GC’s narrative and associated resources (e.g., bibliographies, multimedia, links) provide cutting-edge perspectives of significant research fields, interconnections among these fields, and inspiration to help students define a topic for their project.

Each Grand Challenge includes a brief introduction of the challenge: Who cares? Why? What types of research are being done in this area? What types of research methods are appropriate to address the topic (e.g., interview, survey, archival analysis, participant observation, ethnography, GIS, etc.). What are the most pressing research needs in this field of inquiry?

Each student’s field research must have empirical data and be connected to some academic body of literature. A student’s project is doable if they can formulate clear questions and find the data to answer these questions within six months. *Grand Challenges provide scholarly context and suggest topics for research teams.*

Student research interests vary from year to year. During the early 2000s, when rents were rising quickly, affordable housing was big. But since Al Gore’s *An Inconvenient Truth*, environmental topics have become more popular. Despite such shifts over time, there are some underlying concerns that most USP students share. The majority of USP majors are very applied in their focus—they want projects that have the potential to make the world a better place. They have to have some sense that the project matters “on the ground”. The quick way of conveying the sense of importance of a topic is to convince them that something bad will happen if it is ignored (the “business-as-usual

scenario is a disaster" approach). Conveying a sense that research in a particular field will improve the quality of people's lives also works. Additional ways to communicate the importance of a topic include: a sense that the current issues are part of a broader pattern (the sociological approach), a sense that the topic is cutting edge, or a sense that research can solve a long-standing mystery.

For those who are already excited about the topic, what they really need is a road map of the topic, its major concepts, questions, assumptions, methods and readings. Undergraduates often don't know what they're seeing even when they're looking right at it. They need to be told things like "This is important because..." A relatively easy and quick way of doing this would be to provide brief annotations tagged to suggested readings (all of which can be posted inside the Grand Challenges web space). Why are these readings important? What should the student get from reading them? (In other words, why are they important to a student writing a lit review and preparing to do research?)

### **The Sustainable City-Regions Reader, Video Vignettes and Poster**

What is the Reader's content? The *Sustainable City-Regions Reader* includes research project abstracts and "Research Team" summary reports. The Reader is not intended to be a collection of individual student's papers. Instead, the Reader will provide brief abstracts and Research Team summaries (findings, highlights).

What is the purpose of the Reader? We are creating the Reader to help: (1) promote excellence in undergraduate research education, (2) encourage research integration across disciplinary boundaries, (3) cultivate critical and holistic approaches to solving problems in urban and regional development, and (4) build capacity for science communication and civic-engagement in the context of promoting sustainable development.

Who actually writes the Reader? The *Sustainable City-Regions Reader* is authored by the mentors (faculty, researchers, and community-based partners) and students that make up the USP Research Teams. UCSD's Urban Studies and Planning (USP) Program will serve as the rallying point for the Reader's production through the USP Senior Sequence. Given the rising interest in sustainability across campus, student and faculty involvement from other academic divisions, departments and programs will be encouraged.

Who is the reader's intended audience? The Reader targets several groups: (1) undergraduate seniors as well as graduate students who need to design and carry out field research as part of their academic program, (2) faculty who teach research methods classes requiring fieldwork, (3) faculty looking for ideas and support to do their own civically-engaged research, and (4) community leaders, NGOs, think tanks, public

and private sector organizations interested in policy and planning for sustainable city-region development.

What are the Video Vignettes, and who creates those? Each student is required to do a 3-4 minute video that communicates some highlight of their Senior Research project. This requirement provides a way for students to learn science communication through multimedia and storytelling. Research team also have the option of producing a 3-5 minute video that captures the “story” of the Research Team’s six month journey (process of discovery through research and writing). Students will shoulder the creative and logistical burden of this effort. The course instructor will ensure that the equipment necessary to make it happen is available as needed. Mentors will be asked to lend a helping hand from a conceptual perspective, and this may tie into what the mentor creates as the entry for the Sustainable City-Regions reader. Three to five minutes may seem short. It is. But this short vignette merely serves as an index (summary overview) of the individual student projects (each of which must be communicated via a 3 minute *postercast*).

**Posters:** Each student is required to produce a scientific *poster* conveying the highlights of their research. The posters go on display at our annual Urban Expo at UCSD’s Price Center, as seen in the photo below.

