

## CEE 209S: Disaster Resilience Seminar

<b>Schedule</b>	Wed 12:30 PM - 1:20 PM
<b>Room</b>	Blume Earthquake Engineering Building 02-540, Room 108
<b>Course website</b>	<i>canvas.stanford.edu</i>
<b>Seminar coordinator</b>	Chittayong (Jao) Surakitbanharn Building 02-540, Room 128 <a href="mailto:jao@stanford.edu">jao@stanford.edu</a>
<b>Teaching assistant</b>	Sabine Loos <a href="mailto:sloos@stanford.edu">sloos@stanford.edu</a>

### Description

This seminar will explore current research on disaster resilience, towards the development of new frontiers in resilience engineering science research. This seminar will present topics associated with quantifying, communicating and improving the resilience of urban areas to disasters. Speakers from a range of disciplines will present current research, application, and thinking on innovations, current best practices and the future of disaster resilience. Guest speakers, supplemental reading, and group discussion will be utilized to teach about the complex nature of natural disasters, the impacts on different regions, and the multi-disciplinary/multi-cultural ways of thinking to prepare communities.

### Course format

One week before the seminar, we will distribute reading material or other media suggested by the speaker to orient attendees to the upcoming seminar topic.

On the Monday before the seminar before 4pm, we ask that each attendee write a minimum of one question they have for the speaker onto a shared Google Document. These questions will be emailed to the week's speaker to help him or her understand the interests of the attendees.

On the Wednesday of the seminar, the invited speaker will have 25 minutes to present (consecutive or broken up) and 25 minutes for questions and discussions.

## Schedule

We have asked the speakers for the Fall Seminar to connect their talks to the theme of decision making for disaster resilience.

Week #	Date	Name	Affiliation	Topic
1	9/26	Chittayong (Jao) Surakitbanharn	Stanford Urban Resilience Initiative	Introduction to the seminar
2	10/3	Adam Zsarnoczay	Stanford/NHERI Sim Center	Sim Center workflow for regional resilience analysis and decision making
3	10/10	Milad Memarzadeh	UC Berkeley	Modeling resilience of infrastructure systems in a decision optimization framework
4	10/17	Misse Wester	Lund University	Equity and gender in disaster planning
5	10/24	Marie Christine Razaire	State Farm Innovation Lab	Insurance technology trends for disaster modeling
6	10/31	Charles Scawthorn	SPA Risk LLC	Assessing risk and developing integrated mitigation programs
7	11/7	Greg Crutsinger	Scholar Farms	Aerial imagery in the 2017 Sonoma and 2018 Redding fires for emergency responder decision making
8	11/14	Miyuki Hino	Stanford	Quantifying nuisance flooding impacts
9	11/21	No Seminar (Thanksgiving)	NA	NA
10	11/28	Michael Germeraad	ABAG/MTC	Decision making for resilience in the SF Bay Area
11	12/5	Katherine Mach	Stanford Woods Institute	Integrative assessment of climate change risks and response options to inform decisions and policy

## Attendance

We hope that, through these discussions, the attendees will gain a broader understanding of the resilience research taking place at Stanford and identify opportunities for further work. To do so, we ask that attendees participate actively, asking questions and contributing to discussion. Students enrolling in the seminar for credit are expected to attend regularly. Students who have previously enrolled in CEE 209 or CEE 308 may enroll again for credit.