



Course: An introduction to social-ecological systems research in Latin America Course leaders: Juan Rocha, Albert Norström, Henrik Österblom and Matilda Baraibar Contact person: Juan Rocha [juan.rocha@su.se]

#### Lecturers:

- Néstor Mazzeo (NM)
- Marten Scheffer (MS)
- Laurie-Beth Clark (LC)
- Jesse Kercheval (JK)
- Patricia Balvanera (PB)
- Albert Norström (AN)
- Jorge Marcone (JM)
- Virginia Lucas (VL)
- Francisco Gazitua (FG)
- Angela Leible (AL)
- Cristina Zurbriggen (CZ)

- Henrik Österblom (HÖ)
- Stefan Gelcich (SG)
- Micaela Trimble (MT)
- Therese Lindahl (TL)
- Matías Piaggio (MP)
- Magnus Nystrom (MN)
- Esteban Jobbágy (EJ)
- Eduardo Viola (EV)
- Matilda Baraibar (MB)
- Juan Rocha (JR)

# Course objectives:

- Introduce conceptual frameworks and methods for the study of social-ecological systems
- Introduce methods to answer different types of social-ecological systems research questions
- Explore the role of arts and science in social-ecological systems research
- Develop a network of young scholars in social-ecological research in Latin America

### **Schedule**

When	What	Description		
Saturday 1st (20:00)	Dinner	At Complejo Arenisca (Balneario Solís)		
Sunday 2nd December				
9:00 - 9:15	Introduction	Introduce the aims and structure of the course	JR	
9:15 - 10:15	SES theory and key concepts	Why bother to see reality with a SES lenses?	NM	
10:15 -10:45	CafeARTing	A hands-on reflection and dialogue space for collective creation		
10:45-11:45	CAS and early warning signals	Critical transitions in nature and society: can we detect them?		

11:45 - 12:15	Q & A	Questions for Néstor and Marten modules		
12:30 -13:30	Lunch			
13:30-14:30	Anthropocene 1	Accelerating change in the Anthropocene: the challenges of the ocean	MN	
14.30 -15.00	CafeARTing	A hands-on reflection and dialogue space for collective creation		
15.00-16.00	Anthropocene 2	Accelerating change in the Anthropocene: the challenges of the land	EJ	
16.00-16.30	Q & A	Questions for Magnus and Esteban	MN, EJ	
16.30-17.30	Art and science	The role of arts in Latin America	VL, LC	
19.00-21.00	Dinner	At Hostería Bella Vista Start with toast / aperitif + mingling, dinner served at 20:00.		
	M	onday 3rd December		
9:00 - 9:15	Introduction	Recap previous day and outline day 2	JR	
9:15 - 10:15	Policy 1	Engaging with the dark side of the force - illegal fishing, policy makers, and the big sharks	HÖ	
10:15 -10:45	CafeARTing	A hands-on reflection and dialogue space for collective creation		
10:45-11:45	Policy 2	Engaging with the good side of the force - transformation labs	CZ	
11:45 - 12:15	Q & A	Questions for Henrik and Cristina		
12:30 -13:30	Lunch	What is a sustainable diet?	LB, JR	
13:30-14:30	Economics and environment 1	The integration of ecology and economics: ecosystem services, wellbeing, and policy instruments		
14.30 -15.00	CafeARTing	A hands-on reflection and dialogue space for collective creation		
15.00-16.00	Economics and environment 2	Behavioral economics and environment		
16.00-16.30	Q & A	Discussion with Therese and Matias		
16.30-17.30	History and art	Economic history and the role of trade in Latin America		
19.00-21.00	Student free night			

Tuesday 4th December				
9:00 - 9:15	Introduction	Recap previous day and outline day 3	JR	
9:15 - 10:15	PECS 1	Cross-case comparisons: advantages and challenges	AN	
10:15 -10:45	CafeARTing	A hands-on reflection and dialogue space for collective creation		
10:45-11:45	PECS 2	Cross-case comparisons: advantages and challenges	РВ	
11:45 - 12:15	Q & A	Discussion with Patty and Albert	PB, AN	
12:30 -13:30	Lunch			
13:30-14:30	Co-management	Change makers from the bottom - up: co- management and the experimental economics approach	SG	
14.30 -15.00	CafeARTing	A hands-on reflection and dialogue space for collective creation		
15.00-16.00	Co-management	Change makers from the bottom - up: design and test of institutional arrangements	MT	
16.00-16.30	Q & A	Discussion with Stefan and Micaela	SG, MT	
16.30-17.30	Art and science	Connecting with the roots through art		
19.00-21.00	Dinner	At Complejo Arenisca (Balneario Solís) Start with toast / aperitif + mingling, dinner served at 20:00.		

Wednesday 5th December: SARAS public event in Montevideo: Information & Program

8th SARAS 2018 Public Conference: "Ecosystem services: knowledge creation and decision making" - 13:30 pm to 20:00 pm at the National Auditorium of Sodre, Hugo Balzo Room, Montevideo.

Bus to depart from and arrive at Bella Vista will be provided.

Thursday 6th December: Student lead workshop on research proposals (EV, LC, JR)

Group working day (9:00-17:00) in Mandalas.

Presentation of research proposals (18:00-19:00) in SARAS

BBQ at Hostería Bella Vista (starting at 19:30)

CafeARTing: A hands-on reflection and dialogue space

Facilitated by: Silvana Juri

These sessions, while representing an active break between lectures, are offered to experientially explore the course contents and advance the discussion related to the role of arts and science when developing socio-ecological system research projects. By engaging

all participants in a reflexive and sensorial dialogue, we will seek to collaborate in the creation of an object/s that can enable and embody the collective creation of knowledge, connections and insights while gathering the experience, wisdom and expertise of everyone involved -particularly exploiting the richness and variety of backgrounds and fields.

### Learning outcomes

It is expected that the student, after taking the course, will be able to:

- 1. Understand the concept of social-ecological systems, and related concepts such as resilience, adaptability and transformability.
- 2. Be familiar with a broad spectrum of methods to address research questions in environmental science that integrate approaches from the arts, the humanities, the social and natural sciences.
- 3. Be familiar with challenges and opportunities of doing social-ecological systems research in Latin America
- 4. Be able to develop research proposals to advance social-ecological systems science

## **Assessment and Grading**

Component	Weighting (%)	Learning Outcomes
Participation	20%	1-3
Group presentation of research proposals	30%	4
Group research proposal write-up (deadline Feb 1)	50%	4
	100%	

#### **Criteria for assessment**

The participant must achieve passing grades for all parts of the course in order to pass the course as a whole. Failure to submit on time will result in a maximum grade C. The maximum grade for Fx grade is an E.

The following grades are issued, the lower limits for each grade is expressed as a percentage of the maximum points available:

A 95% Excellent

B 85% Very good

C 75% Good

D 65% Satisfactory

E 60% Sufficient (pass)

Fx 50% Insufficient (fail)

F Below 50% Poor or insufficient conduct (fail)