CMS Summer School 2020: Interdisciplinary skills for equitable climate adaptation in social-ecological systems

February 3rd - 7th, 2020, Hobart, Tasmania, Australia

Course Description
This short course, run by the Centre for Marine Socioecology, introduces graduate students and early career researchers to interdisciplinary research skills in the context of applied climate change adaptation and social equity in marine social-ecological systems. Throughout the week you will learn about both theory and practice relating to adaptation at a variety of scales and in different contexts. You will consider a range of related issues such as equity, trade-offs and conflict. We will use the lens of climate change adaptation to help you develop core professional competencies for becoming an interdisciplinary researcher. These skills could be applied in almost any research context, and so the course could be of interest to those working in research areas unconnected to adaptation or marine systems per se. The course will be delivered via a series of lectures, skill development sessions, group project work and a field trip. The central activity of the course will be developing a collaborative interdisciplinary project proposal in response to a real-world problem identified by representatives from various marine stakeholder groups including the state government, industry and NGO's.

Course Topic
Climate change is happening at an unprecedented rate, with local to global effects on natural systems. These impacts include melting ice, rising seas and increasingly frequent extreme weather events, driving floods, coastal erosion, heat waves and droughts. It is essential that society adapts to these changes by taking practical action to manage risks effectively, build societal and economic resilience, and recognise and act on opportunities that may arise. This challenge is further complicated by the uneven spatial and socio-economic distribution of climate change impacts. As a result, climate change adaptation must be viewed through the lens of social equity. Fairness in the distribution of opportunities, benefits, and access to resources for all members of society is essential for effective climate actions that ensure long-term sustainable development. But how can we deal with climate change adaptation, fix current inequity problems and avoid unintended outcomes into the future? Addressing issues related to climate change adaptation and social equity today and for future generations, requires an interdisciplinary approach that brings together ecological, social, and economic perspectives.

Learning Outcomes
On successful completion of this course, participants will be able to:

• Understand the meaning, role and examples of adaptation and equity for social-ecological systems in the context of climate change
• Compare and contrast different disciplinary perspectives and methodological approaches, including interdisciplinary approaches
• Plan and initiate an interdisciplinary research collaboration
• Develop interdisciplinary research questions
• Communicate research ideas to non-specialists
• Develop and pitch a grant application for an interdisciplinary research program
Content

- Climate change adaptation, primarily in a marine resource context but with principals relevant to all systems
- Equity, conflict and trade-offs in social-ecological systems
- Ontology and methodology of different (natural and social science) disciplines
- ‘Tasting menu’ of methods commonly used in and across different disciplines in a socio-ecological context, to approach interdisciplinary problems
- Consideration of personalities and individual working preferences to build effective teams
- Grant writing and pitching of interdisciplinary research proposals

Guest Presenter and Facilitator

- Professor Eddie Allison (https://environment.uw.edu/faculty/edward-allison/)

Course Presenters (to be finalised)

- Dr Kirsty Nash https://www.utas.edu.au/profiles/staff/imas/kirsty-nash
- Dr Karen Alexander https://www.utas.edu.au/profiles/staff/imas/karen-alexander
- Dr Ingrid van Putten https://people.csiro.au/V/I/Ingrid-Vanputten
- Dr Maree Fudge http://marinesocioecology.org/
- Dr Rachel Kelly http://marinesocioecology.org/
- Dr Mary MacKay http://marinesocioecology.org/
- Dr Camilla Novaglio http://marinesocioecology.org/
- Dr Jess Melbourne-Thomas https://people.csiro.au/m/j/jess-melbourne-thomas
- Dr Emily Ogier https://www.utas.edu.au/profiles/staff/imas/emily-ogier
- Professor Gretta Pecl https://www.utas.edu.au/profiles/staff/imas/Gretta-Pecl

Stakeholders

- Dr Ian Dutton, Director (Marine Resources), Department of Primary Industries, Parks, Water and Environment
- Martin Exel, Managing Director SeaBOS & General Manager Environment and Policy, Austral Fisheries
- Non-Governmental Organisation representative (TBC)
- Blue Economy CRC Representative (TBC)
- Dr. Philippa Cohen, Program Leader, Resilient Small-scale Fisheries, WorldFish

Cost

Free for UTAS postgraduate students. $500 AUD for external students and ECR’s. Subsidised accommodation is also available if required for $500 for the week.

Funding

Scholarships for travel and accommodation may be available for Australian Indigenous postgraduate students. Please send enquiry email to the contact below by November 31st 2019 if interested.

For more information please contact

Dr Madeline Green, Executive Support & Research Development Officer
Centre for Marine Socioecology, Madeline.green@utas.edu.au
<table>
<thead>
<tr>
<th></th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
<th>Day 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morning Session 1</td>
<td>Lecture: Adaptation &amp; Equity</td>
<td>Lecture: Adaptation &amp; Equity</td>
<td>Lecture: Adaptation &amp; Equity</td>
<td>Lecture: Adaptation &amp; Equity</td>
<td>Lecture: Adaptation &amp; Equity</td>
<td>Lecture: Adaptation &amp; Equity</td>
</tr>
<tr>
<td>Morning Tea</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morning Session 2</td>
<td>Workshop: Perspective, approach &amp; methodology of different disciplines</td>
<td>Workshop: Personalities &amp; team-building</td>
<td>Workshop: Grant writing &amp; pitching skills</td>
<td>Group work: Revise project proposal</td>
<td>Group work: Revise project proposal</td>
<td></td>
</tr>
<tr>
<td>Lunch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Afternoon Session 3</td>
<td>Workshop: Methods for interdisciplinary methods tasting menu</td>
<td>Group work: Develop project proposal</td>
<td>Pitching: 1st pitch to industry &amp; feedback</td>
<td>Field trip</td>
<td>Pitching: 2nd pitch to industry &amp; feedback</td>
<td></td>
</tr>
<tr>
<td>Afternoon Tea</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Afternoon Session 4</td>
<td>Welcome &amp; intros</td>
<td>Workshop: Methods for interdisciplinary methods tasting menu</td>
<td>Group work: Develop project proposal</td>
<td>Pitching: 1st pitch to industry &amp; feedback</td>
<td>Field trip</td>
<td>Pitching: 2nd pitch to industry &amp; feedback</td>
</tr>
<tr>
<td>Afternoon Session 5</td>
<td>Welcome &amp; intros</td>
<td>Reflection: Learning &amp; interdisciplinary skills</td>
<td>Reflection: Learning &amp; interdisciplinary skills</td>
<td>Reflection: 1st pitch</td>
<td>Field trip</td>
<td>Reflection: 2nd pitch</td>
</tr>
<tr>
<td>Evening</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Group dinner</td>
<td></td>
</tr>
</tbody>
</table>