C3 2018: Practising Interdisciplinary Research on the Environment

Instructor: Sharachchandra Lele (slele@atree.org)
Co-instructors/Associates: Veena Srinivasan, Nitin Rai, Bejoy K. Thomas

Credits: 3 (48 contact hours in the form of 16 sessions of 3-hours each)

Session time: Monday 9:50am-1pm (starting January 8th, 2018)

Course description:
This core course is meant to help students understand how to carry out interdisciplinary research on the environment. It will build on the disciplinary knowledge to which students were exposed in semester 1 and focuses on the challenge of linking and integrating this knowledge to study society-environment interactions holistically. It will begin by exploring the nature of environmental problems as a special class of social problems, of the inherently value-laden nature of such problems, and the need for and challenge of doing rigorous interdisciplinary but rigorous research in this context. It then will explore the specific normative ideas that are central the environment-development debate, and take students through different (often competing) perspectives on the society-environment relationship.

In the second half of the course, we will discuss in detail a series of examples of interdisciplinary research that have used one or more of these perspectives to frame and analyse a particular environmental problem. Attention will be paid to understanding the normative, theoretical, and methodological choices made in the studies, including specifically the interdisciplinary linkages and the within-disciplinary choices and modifications.

At the end of such a course, the student is expected to understand how their framing of their research problem involves normative and theoretical choices, be in a position to frame and flesh out an interdisciplinary research programme on the environment, and to understand the place of their research (now and future) in the wider action-research-policy context.

Session format
This course will be reading- and writing-intensive. It will be taught in 3-hour sessions. Each session will have readings assigned to it, and these readings will form the basis for class discussion.

Course assessments:
1. Students will be expected to submit written summaries of key readings related to the 8 case studies (40% of total marks) (Guidelines will be provided)
2. Students will be expected to participate actively in class discussions and to have completed readings even when written summaries are not required (30%). Marks will be given primarily for (but not exclusively for) the first 8 sessions. Missing sessions for non-medical/emergency reasons will lead to automatic deduction of participation points.
3. Students are expected to make a presentation of a proposal for interdisciplinary environmental research (preferably on their PhD topic) that addresses the challenges of framing, theoretical integration, linked variables, methods, scales,
etc. (30%) (Guidelines on what is expected will be provided; but submission of the first outline is due by 5\textsuperscript{th} March, and second outline by 16\textsuperscript{th} April).

**Session-wise time-table (All classes Monday 9:50am to 1:00pm)**

<table>
<thead>
<tr>
<th>Session</th>
<th>Date</th>
<th>Title</th>
<th>Readings</th>
<th>Instructor</th>
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<tbody>
<tr>
<td>1</td>
<td>8-Jan-2018</td>
<td>Nature of environmental problems, need for inter-disciplinary and science-policy-practice bridges and challenges therein</td>
<td>[1], [2, 3], [4], [5]</td>
<td>Sharad</td>
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<td></td>
<td>15-Jan-2018</td>
<td><strong>HOLIDAY: Sankranti</strong></td>
<td>Optional: [6] [7, 8]</td>
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<td>2</td>
<td>22-Jan-2018</td>
<td>Key normative ideas (Conservation, Sustainability, Environmental Justice, Sustainable Development, Democracy)</td>
<td>[9], [10], upto p.10, [11], [12, chapter 1]; optional: [13], [14], [15]</td>
<td>Sharad</td>
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<td>3</td>
<td>29-Jan-2018</td>
<td>Perspectives1&amp;2: Economics and Institutional Analysis</td>
<td>[16]-chapters 3 &amp; 4, [17] [18]</td>
<td>Sharad</td>
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<td>4</td>
<td>5-Feb-2018</td>
<td>Perspectives 3&amp;4: Political Ecology and Env.Ethics</td>
<td>[16]-chapter 7 and chapter 5, [19]</td>
<td>Sharad</td>
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<td>6</td>
<td>19-Feb-2018</td>
<td>Perspective 6: Technology</td>
<td>[22], [23], [24], [25] + Optional: [26].</td>
<td>Sharad</td>
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<td>7</td>
<td>26-Feb-2018</td>
<td>Implementing interdisciplinarity-I: Frameworks and worldviews</td>
<td>[27, 28]</td>
<td>Sharad</td>
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<td>8</td>
<td>5-Mar-2018</td>
<td>Implementing interdisciplinarity-II: Variables, scales, methods &amp; rigour</td>
<td>[1], [29] [30]</td>
<td>Sharad</td>
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<td>9</td>
<td>12-Mar-2018</td>
<td>Forest Degradation: Soppinabettas</td>
<td>[31, 32-chapter 6, 33]</td>
<td>Sharad</td>
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<td>10</td>
<td>19-Mar-2018</td>
<td>Forest Degradation: Som &amp; Prabhakar</td>
<td>[34], [35], [36], [37]</td>
<td>Sharad</td>
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<td>12</td>
<td>2-Apr-2018</td>
<td>Grasslands: Turner (TBC)</td>
<td>[40], [41], [42] (TBC)</td>
<td>Bejoy</td>
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<td>13</td>
<td>9-Apr-2018</td>
<td>Sustainable environment &amp; livelihoods: Machakos</td>
<td>[43], [44]</td>
<td>Nitin</td>
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<td>14</td>
<td>16-Apr-2018</td>
<td>Water: case 1: GW in Chennai</td>
<td>[45], [46], [47]</td>
<td>Veena</td>
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<td>16</td>
<td>30-Apr-2018</td>
<td>Water: case 3: Arakavathy basin</td>
<td>[49], [50], [51]</td>
<td>Veena</td>
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<td>EXAM WEEK</td>
<td>DATE TBA</td>
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<td></td>
<td>DATE TBA</td>
<td>Student presentations</td>
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**READING LIST**


