



# Doctorado en BIOLOGÍA Y ECOLOGÍA APLICADA

Programa cooperativo entre la Universidad Católica del Norte y la Universidad de La Serena  
www.dr-bea.cl

## Programa de Asignatura

I. IDENTIFICACIÓN DE LA ASIGNATURA	
<b>Nombre:</b> Advanced Readings in Ecology	
<b>Código:</b>	<b>Fecha Actualización:</b> Agosto 2009
<b>Unidad Responsable:</b> Facultad de Ciencias del Mar, UCN	
<b>Carrera:</b> Dr. BEA	<b>Plan:</b>
<b>Tipo:</b> Semestral	<b>Carácter:</b> Optativo
<b>Horas Directas:</b> 2 semanales	<b>Número de Créditos:</b> 4
<b>Semestre:</b> Segundo	
<b>Pre-requisitos:</b> Ninguno	
<b>Coordinador:</b> Dr. Bernardo Broitman	
<ul style="list-style-type: none"><li>• Horario: Se definirá en común acuerdo entre los profesores y alumnos</li><li>• Lugar: Universidad Católica del Norte</li></ul>	

II. OBJETIVOS DE LA ASIGNATURA
<p><b>GENERALES:</b> This course will function as a distributed graduate seminar in which students participate in selection and presentation of readings and in which they critically and constructively discuss contents and format of the presented papers.</p>
<p><b>ESPECÍFICOS:</b></p> <ol style="list-style-type: none"><li>1) To provide the student with a critical view of current topics in Ecology, emphasizing Ecological Applications and Theory.</li><li>2) To train the students in Publication Submission and Peer-Review skills including online collaboration and evaluation.</li><li>3) To expose the students with a course that will be carried out completely in English.</li></ol>





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### III. CONTENIDOS

Readings that will be treated during the seminar include, but are not limited to:

- Metacommunity theory and dynamics
- Marine-Terrestrial comparison
- Behavior and its role in Ecology
- Dispersal Ecology
- Parasite Ecology
- Invasive Species
- Climate Change
- Defenses
- Fisheries (i.e. applied) Ecology

### IV. MODALIDAD DE APRENDIZAJE

The classes will be structured as an interactive seminar divided into a text online session and a verbal discussion meeting. Students will act as discussion leaders and discussion participants. During biweekly meetings selected papers of a particular topic will be discussed. During the days preceding the discussion meeting the participants will read the selected papers and briefly comment on a review that has been elaborated by the discussion leader. Each student will sign responsible for one weekly discussion on a specific topic. This student will function as discussion leader and select 2-3 short-format papers, which are made available on the course website as soon as possible, and no later than 3 days before the discussion day. The leading student will carefully read all papers, and prepare a written review (200 – 500 words) of one of the three papers, which must be posted on the course website at least 5 days before the discussion day.

During the week before the discussion day, the participating students will read the key-paper and peer-review the review of the discussion leader through a less than 250-word comment to the post. Following reviewers comments, the discussion leader will present and lead a discussion (in English) of the three papers (s)he had selected.

The participating students will carefully read the papers for each discussion day. Where necessary or desired, they can also search for other papers. It is expected that all participating students will prepare carefully for the discussion day and participate actively in the discussions.





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The first two discussion days will be led by the professors; during the first two weeks students select their discussion topics and a final schedule will then be prepared for the remaining nine discussion days.

The weekly discussions will be open to all the professors of the doctorate program *Biología y Ecología Aplicada* (BEA).

### V. EVALUACIÓN

We have followed a scheme reported by Iyengar et al. (Science (2008) 319:1189-1190), using Science's Signal Transduction Knowledge Environment (STKE), where the students are evaluated following their review, peer-review, participation and presentation skills. The evaluation will be divided as follows:

Paper choice (discussion leader)	10%
Paper review (discussion leader)	20%
Paper presentation (discussion leader)	20%
Class participation (discussion participant)	20%
Peer-review quality (discussion participant)	20%
Bonus for extra participation (discussion participant)	10%

