



**Sub-Antarctic Biocultural Conservation Program**  
**University of North Texas, Universidad de Magallanes & Institute of Ecology and Biodiversity**  
[www.chile.unt.edu](http://www.chile.unt.edu) & <http://www.umag.cl/facultades/williams/> - [www.ieb-chile.cl/ltser](http://www.ieb-chile.cl/ltser)

**INTRODUCTION TO SUB-ANTARCTIC BIOCULTURAL CONSERVATION**  
**Fall 2014**

**Core Professors:**

Dr. Jaime E. Jiménez, *wildlife ecologist*, UNT

<https://faculty.unt.edu/editprofile.php?pid=3709&onlyview=1> (Dept. Biology & Dept. Philosophy)

Dr. Ricardo Rozzi, *conservation biologist & philosopher*, UNT

<https://faculty.unt.edu/editprofile.php?onlyview=1&pid=2117> (Dept. Philosophy)

**Collaborating & Invited Lecturers:**

Dr. J. Baird Callicott, *philosopher*, UNT <http://www.phil.unt.edu/people/faculty/j-baird-callicott>

Dr. Bernard Goffinet, *bryologist*, University of Connecticut <http://www.eeb.uconn.edu/people/goffinet/>

Dr. Julie C. Hagelin, *ornithologist*, Institute of Arctic Biology, University of Alaska Fairbanks

[http://mercury2.iab.uaf.edu/iab/facstaff/people\\_info.php?people\\_id=1026](http://mercury2.iab.uaf.edu/iab/facstaff/people_info.php?people_id=1026)

Dr. James H. Kennedy, *biologist*, UNT <https://faculty.unt.edu/editprofile.php?pid=1930&onlyview=1>

Dr. Roy May, *environmental theologian and philosopher*, Latin American Bible University of Costa Rica

Dr. Rajan Rijal, *environmental scientist*, UNT <https://faculty.unt.edu/editprofile.php?pid=4601&onlyview=1>

Dr. Derek Sikes, *entomologist*, University of Alaska, [http://users.iab.uaf.edu/~derek\\_sikes/people.htm](http://users.iab.uaf.edu/~derek_sikes/people.htm)

Dr. Philip Loring, *human ecologist*, University of Saskatchewan [http://www.usask.ca/sens/our-people/faculty-profile/Core/Philip\\_Loring.php](http://www.usask.ca/sens/our-people/faculty-profile/Core/Philip_Loring.php)

**Course Catalogue Information (sections 001 & 031):**

PHIL 4053, 6780

BIOL 4053, 5053

**Class Schedule:**

Fall semester; Thursdays, 6:00-8:50 pm (Central Daylight/Standard Time)

Chilton Hall, Room 245

**Office Hours:**

J. Jiménez: Wed 3:00-4:30 pm (EESAT 310V) or by appointment (Phone: 940-369-8211; email:

[Jaime.Jimenez@unt.edu](mailto:Jaime.Jimenez@unt.edu))

R. Rozzi: Thu 3:00-4:30 pm (EESAT 310P) or by appointment (email: [rrrozzi1@gmail.com](mailto:rrrozzi1@gmail.com))

**Academic Dishonesty Policy:**

Students are responsible for reading, understanding, and knowing UNT's Academic Dishonesty Policy that can be found at: <http://facultysuccess.unt.edu/academic-integrity>. Academic dishonesty in this class is unacceptable and will not be tolerated in any form.

**Disability Accommodation (ODA Statement):**

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information see the Office of Disability Accommodation website at <http://www.unt.edu/oda>. You may also contact them by phone at 940-565-4323.

**Drop/Withdrawal Information:**

Last day to drop without professor's approval is September 8<sup>th</sup> 2014. Other Drop/Withdrawal Information and other important Academic Dates can be found at <http://registrar.unt.edu/registration/fall-add-drop>. Before dropping the course, please come and discuss this with us.

## **INTRODUCTION TO SUB-ANTARCTIC BIOCULTURAL CONSERVATION**

**Course Description:**

The course will provide students with an introduction to sub-Antarctic biological and cultural diversity, as well as to the approach of the Sub-Antarctic Biocultural Conservation Program at UNT. Students will gain an overview of the flora, fauna, geography, climate, and ethnography of southern South America. They will also gain a conceptual framework to integrate environmental philosophy and ecological sciences, and their integration into practical and theoretical aspects of biocultural conservation, including education and ecotourism. Additionally, and as a way of comparing and contrasting with the Sub-Antarctic contents, the course will have a section on Sub-Arctic contents. As a leitmotiv for the course, at the beginning of the classes in Unit I and some of Units II we will start by analyzing a Native American Mapuche or Yahgan bird stories.

To confront global environmental change it is necessary, but not sufficient, to conduct long-term socio-ecological research. It is also necessary to act. We will discuss the approaches of biocultural ethics and Earth stewardship to address these challenges. Earth Stewardship implies a paradigm shift in ecological sciences: it calls ecologists to engage not only in the production of knowledge, but also in public discourse, decision making, education, and governance. As a means of engaging science and society in rapidly reducing current rates of anthropogenic damage to the biosphere, the Ecological Society of America (ESA) launched the Earth Stewardship Initiative in 2009. Since then, this call for action has been appealing not only to ecologists, but also to anthropologists, sociologists, engineers, economists, religion scholars, philosophers, conservation biologists, other professionals, decision makers, and citizens interested in environmental, economic, and social sustainability. This course will introduce this initiative and invite students to participate in the ESA Centennial Anniversary Meeting that will take place in Baltimore in August 2015. Biocultural ethics advances the Stewardship Initiative toward a planetary scale, presenting a range of ecological worldviews, practices, and institutions in different parts of the world and to use them as the basis for considering what we could learn from one another, and what we could do together. Today, inter-hemispheric, intercultural, and transdisciplinary collaborations for Earth Stewardship are an

imperative. Biocultural ethic emphasizes that we are co-inhabitants in the natural world; no matter how complex our inventions may become (Peter Raven 2014).

We all bring different skills and mindsets to this course and will work as a group to broaden and integrate our approaches to biocultural conservation. This semester-long seminar-style course will have an emphasis on ethno-ornithology and ecotourism, as a way to implement biocultural conservation. The course is part of a broader International Research Experience, and a study-abroad field course, entitled Tracing Darwin's Path (TDP). Although this course is a recommended pre-requisite for the TDP field course, participation in the field components associated with the semester-long seminar course is not a requirement.

We will use various interactive features during the course, including Blackboard, videoconferences, and live streaming. Course materials will be made available online through Blackboard and [www.chile.unt.edu](http://www.chile.unt.edu). Students are required to check Blackboard regularly for updates to the syllabus, announcements and access to course materials.

### **Course Goals:**

Through readings, films, and seminars students will develop:

- Familiarity with both biological and cultural diversity.
- A basic understanding of the geography, history, culture, and ecology of the sub-Antarctic ecoregion of southern South America.
- An understanding of similarities and differences between Sub-Antarctic and Sub-Arctic ecosystems, and worldviews from indigenous people and members of other socio-cultural groups that inhabit these regions.
- A comprehension of under-appreciated biodiversity (bryophytes, lichens, and freshwater invertebrates), and traditional ecological knowledge.
- A distinctive interdisciplinary approach to biocultural conservation that integrates environmental philosophy and ecological sciences.
- Familiarity with examples of Neotropical ornithology, biotic homogenization, and flagship species.
- We will focus on some key figures on biocultural diversity (e.g., Darrel Possey, Luisa Maffi), South American environmental philosophy (e.g., Leonardo Boff, Chico Mendez, and Dorothy Stang), comparative environmental philosophy (e.g., Baird Callicott), environmental philosophy and education (e.g., Eugene Hargrove, Peter Feinsinger), narrative philosophy and ethics (e.g., Alasdair MacIntyre).

### **Readings:**

#### **Required purchased text is:**

- Rozzi, R. et al. 2010. *Multi-Ethnic Bird Guide of the Sub-Antarctic Forests of South America*. UNT Press, Denton, Texas-Ediciones Universidad de Magallanes, Punta Arenas, Chile.
- Additional readings will be made available in PDF from the course Blackboard platform and are subject to change up to one week in advance if necessary.

#### **Recommended purchased text:**

- Rozzi, R. & J. E. Jiménez. 2014. *Magellanic Sub-Antarctic Ornithology: First Decade of Long-Term Bird Studies at the Omora Ethnobotanical Park, Cape Horn Biosphere Reserve, Chile*. University of North Texas Press, Denton, Texas-Universidad de Magallanes, Punta Arenas, Chile.

## **Course Evaluation:**

### **1) Group Presentations (15%)**

Students groups of 4-5 will give 15 minute presentations on **Dec. 4<sup>th</sup>** based on a research topic chosen at the beginning of the semester (see Appendix with list of Research Topics Fall 2014). Each group is required to submit, by email, a professional PPT presentation on **Oct. 23<sup>th</sup>**, which will be returned with comments prior to the presentation. Groups are expected to incorporate and/or address the comments, questions, and indications given as feedback into the first draft PPT to be presented on **Dec. 4<sup>th</sup>**. Additionally, on **Dec. 4<sup>th</sup>** graduate students will require presenting a seminar on a flagship species.

### **2) Final Essay (20%)**

Groups of 4-5 students will select a topic of relevance to sub-Antarctic/sub-Arctic biocultural conservation and elaborate a “review-type” article (on the same topic as their presentations), using an extensive bibliographic search. The essay will be max 6 pages, formatted as double space, font size 12, Times New Roman, and 1-inch margins (not including bibliography – 1 to 3 additional pages).

**To receive credit, essays must include:** 1) a brief introduction; 2) main questions or thesis researched in the presentation; 3) results and thesis proposed; and 4) broader implications of the findings and statements.

On **Oct. 30<sup>th</sup>** students will turn in the first draft of their essays. The essays will be distributed to the class as supplementary reading materials. On **Nov. 6<sup>th</sup>** groups will receive feedback from their classmates and professors of the course about their drafts. Addressing the questions and suggestions provided on the drafts, each group will prepare a final paper, max 10 pages, double spaced, font size 12, Times New Roman, 1-inch margins (not including bibliography – 1 to 3 additional pages) for **Dec. 4<sup>th</sup>**; **no exceptions will be made for this deadline.**

### **3) Attendance and Participation (10%)**

Attendance is mandatory. Students are responsible to prepare ahead of time, attend ***all*** lectures and discussion sessions, ask questions, and express themselves creatively and concisely in their work. Ways of earning points for class participation include being prepared to contribute positively to class discussion of the assigned readings. Contributing positively requires having read, and as thoroughly as possible understood the assigned readings, and at least being able to raise important questions if not provide definitive answers. Undergraduate students are responsible for all required readings, and graduate students are responsible for required and supplementary readings. Authorized absences that will be considered on a case-by-case basis include: religious holidays, call to active military duty and a certified sickness by a medical professional. Unauthorized absences will affect participation grade.

### **4) Preparation Quizzes (25%)**

At the beginning of each class, a short quiz will be taken regarding the material contained in the required (all students) and supplementary (only graduate) readings for that week.

### **5) Tests (30%)**

Three tests will be taken during the semester worth each 10% of the grade. Graduate students will be given an additional question on each exam.

**The final grade** earned will correspond to the following scores, weighted by each activity:

A = 90 – 100

B = 80 – 89

C = 70 – 79

D = 60 – 69

F = 0-59

**Course 2014 Program**

Date	Topic	Readings / Assignments	Lecturer
28 August	Syllabus review  <b>Introduction to the Bio-Cultural Conservation Course</b>	Rozzi et al. 2010a. <i>Multi-Ethnic Bird Guide</i> : pp. 167-170: Omora, Yahgan story.  Film: <i>Homage to the Yahgans</i>  Supplementary: Rozzi et al. 2006 & 2012 <a href="http://www.ecologyandsociety.org/vol11/iss1/art43/">http://www.ecologyandsociety.org/vol11/iss1/art43/</a>	R. Rozzi & J. Jiménez
<b>Unit I: Environmental Philosophy, Ecotourism &amp; Biocultural Diversity</b>			
04 September	<b>Biocultural Conservation, Field Environmental Philosophy &amp; Sustainable Tourism in the Sub-Antarctic and Himalayan sub-polar regions</b>	Rozzi et al. 2010a. <i>Multi-Ethnic Bird Guide</i> : (a) pp. 52-55: Magellanic Tapaculo ( <i>Tuto / Titifken</i> ) Yahgan & Mapuche story (b) pp. 9-40: Ethno-ornithological Philosophy & Env. Ethics  Rozzi et al. 2008a, Rozzi 2014a, Dorje 2011  Supplementary: Nepal 2002, Rijal et al. 2011  Film: <i>Ecotourism with a Hand-Lens "The Invisible Journey"</i> Aguirre 2014: <i>Hermeneutic and Field Environmental Philosophy</i>	R. Rozzi & R. Rijal
#11 September	<b>Sub-Antarctic Bryology in "The Miniature Forests of Cape Horn:" Science, education, and conservation</b>	Rozzi et al. 2010a. <i>Multi-Ethnic Bird Guide</i> : pp. 176-179: Long-Tailed Meadowlark ( <i>Lloyka</i> ) Mapuche story (transport of medicinal plants)  Goffinet et al. 2012 : (a) Preface (Serendipity) (b) Chapter 1 (c) Chapters 2 & 3 Lewis et al. 2014	B. Goffinet

		Rozzi et al. 2008b	
18 September	<b>Biocultural Ethics, Earth Stewardship, and Field Environmental Philosophy in the Anthropocene</b>	<p>Rozzi et al. 2010a. <i>Multi-Ethnic Bird Guide</i>: pp. 187-190: Southern-Crested Caracara (<i>Traru</i>) Mapuche story</p> <p>Chapin et al. 2011 (Earth Stewardship) Rozzi 2013, 2014b, c (Biocultural Ethics)</p> <p>Supplementary: Steffen et al. 2011 Film: <i>The Return to the Den</i></p>	R. Rozzi
25 September	<b>Biocultural Ethics, Conservation, and Liberation Theology</b> <p>Roy May on environmental ethics &amp; Dorothy Stang, Chico Mendes, and Leonardo Boff</p> <p>Review of Biocultural Ethics</p>	<p>Rozzi et al. 2010a. <i>Multi-Ethnic Bird Guide</i>: pp. 201-205: Andean Condor (<i>Manke</i>), Mapuche story</p> <p>May 2014 (Dorothy Stang) Palmer 2013</p> <p>Supplementary: Film: <i>They killed Sister Dorothy</i></p>	R. May
02 October	<b>Environmental Ethics, Earth Stewardship, and the Ecological Society of America Centennial</b>	<p>Rozzi et al. 2010a. <i>Multi-Ethnic Bird Guide</i>: pp. 115-120: Buff-Necked Ibis (<i>Lejuwa</i>), Yahgan story pp. 9-11, Callicott 2010 (Foreword)</p> <p>Callicott 2014 (The Centennial Return of Stewardship to the Ecological Society of America)</p>	J. Baird Callicott
<b>Unit II: Magellanic Sub-Antarctic Ecoregion &amp; Biocultural Diversity</b>			
09 October	<b>Exam Unit I</b> <p>The Magellanic Sub-Antarctic Ecoregion landscapes</p>	<p>Rozzi et al. 2010a. <i>Multi-Ethnic Bird Guide</i>: pp. 147-149: Austral Trush (<i>Hakasir / Wilki</i>), Mapuche and Yahgan story Introduction to the temperate forests. <i>Multi-Ethnic Bird Guide</i>. Pp. 15-20.</p> <p>Armesto et al. 1998 Rozzi et al. 2012, 2014 pp. 2-39</p>	J. Jiménez
16 October	Insect ecology and conservation education	<p>Rozzi et al. 2010a. <i>Multi-Ethnic Bird Guide</i>: pp. 94-97: Ringed Kingfisher (<i>Chalwafe</i>), Mapuche story</p> <p>Moorman et al. 2006</p>	J. Kennedy

		Rozzi et al. 2010b. Pp. 1-5  Supplementary: Contador et al. 2012  Film: <i>Convivencia</i>	
#23 October	Magellanic Sub-Antarctic Avifauna  Biogeography and origin of Sub-Antarctic birds	Rozzi et al. 2010a. Multi-Ethnic Bird Guide: pp. 49-51: Magellanic Woodpecker (Lana), Yahgan story  Vuilleumier 1985  Supplementary: Jiménez & Rozzi 2014 Ippi et al. 2009 Elphick et al. 2014  Film: <i>The Life of Birds</i> by David Attenborough.	J. Jiménez
@30 October	<b>Exam Unit II</b>  <b>Introduction to Unit III: Sub-Arctic Biocultural Diversity</b>	<b>Students turn in short essay draft</b>	J. Jiménez J. Hagelin
<b>Unit III: Sub-Arctic Biocultural Diversity</b>			
@6 November	<b>Sub-Arctic Ornithology, Landscapes, and Conservation</b>  <ul style="list-style-type: none"> <li>Hagelin's perspectives on Conservation and Ornithological studies in the Sub-Arctic</li> <li>A human case-study that spans environments and cultures of the two hemispheres.</li> </ul>	Rich et al. 2004 Kessel & Gibson 1976 Yesner 2004	J. Hagelin J. Jiménez
@13November	<b>Sub-Arctic Entomology, Landscapes, and Conservation</b>  Insect Ecology and Conservation	Ball 1967 Demain et al. 2009 Magoun & Dean 2000 pp. 38-41	D. Sikes
@20November	<b>Sub-Arctic Biocultural Diversity</b> (culture, linguistic, ecological worldviews and traditional ecological knowledge)	Cruikshank 2001 Hunn et al. 2003	P. Loring

	Ethnography and landscapes		
04 December	<b><i>Undergraduate and Graduate Group presentations</i></b>  Woodpeckers & Flagship species seminar <i>by graduate students</i>	Supplementary: Walpole & Leader-Williams 2002  <b><i>Submission of final essays</i></b>	J. Jiménez
11 December	<b>Final Exam</b>		J. Jiménez

@indicates videoconference between University of Alaska/University of Saskatchewan, and UNT

# indicates videoconference between University of Connecticut, University of Alaska, and UNT

## READINGS REFERENCES

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