**Conservation Biology and Practice in Brazil’s Atlantic Forest**

**EBIO / ENVS 4340 (4 Credits)**

Global Seminar
May 2019

Information Meeting Presentation
7 November 2018

Black Lion Tamarin

Dr. Tim Kittel
Faculty Director, Brazil Program Research Associate, INSTAAR

All photos (c) T. Kittel unless otherwise indicated
Program Highlights —

- Learn about Brazil’s other tropical forest—the Atlantic Forest

Vertebrate Species Richness
dark blue <5    dark red >600 species
Program Highlights —

- Obtain hands-on experience in principles of conservation biology

The Atlantic Forest —

- High fauna & flora endemism
- 30% Plants, 60% Mammals, 90% Amphibians
Program Highlights —
A threatened center of high faunal and floral biodiversity

The Atlantic Forest —
❖ 5-7% remaining
= ‘Conservation crisis’ setting
Program Highlights — 
... Obtain hands-on experience with conservation practice in a human setting

Small & Large-scale Agriculture  
e.g., Dairy, Cattle, Sugarcane

Cattle Pasture

Eucalyptus Plantation
**Host Institution**

- IPÊ: Institute of Ecological Research
- Brazilian environmental NGO
- Integrated local community conservation programs
- *Couple biological understanding with socioeconomic context*
IPÊ: Institute of Ecological Research

www.ipe.org.br/english/
Three Locations in Brazil —

- Iguaçu Falls
- Pontal do Paranapanema
- Nazaré Paulista
- Rio de Janeiro
- São Paulo
Nazaré Paulista – IPÊ’s Headquarters

& Latin American Teaching Campus –
• US students since 2000

Lecture hall –
• WiFi, Internet
IPÊ’s Facilities —

Dormitory –
• 4-person suites
• Volleyball court

Dining Hall –
• Special dietary needs –
  • e.g. Vegetarian, Gluten-free

Lounge –
• Cable TV
• Piano
Rural Neighborhood —

- Hikes
  - Bird, mammal watching
- Reservoir access
- Yoga retreat center
  - Organic garden

Ochre-faced Tody-Flycatcher
(c) Guiherme Fernandes

Marmoset
Pontal do Paranapanema, western São Paulo State
Interior São Paulo – Semideciduous Forest

Morro do Diablo State Park
Field Research with the Black Lion Tamarin Project

- Species biology – Discover what makes species vulnerable
- Spend the day in the field monitoring wild populations
  - Telemetry
  - Collecting data on ecology & demographics
Landscape Conservation

- Landscape Conservation
- Landowner Legal Compliance
- “Wildlife-designed” Landscapes

Spend the day in a Corridor – Learn how to evaluate their utility to wildlife & ecosystem services

Learn reforestation techniques

Landscape Connectivity – Habitat Restoration
“Coffee with Forest”
Agroforestry

→ Creating
Forest Stepping Stones

Programs with now-settled
‘Landless’ families

Spend the day with a local Settler family, learning their realities & their dreams
Integrated local community conservation programs

“Coffee with Forest”
Agroforestry

→ Creating
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Integrated local community conservation programs

Community Tree Nurseries

Spend the day in the nursery, learning about seedling production
Environmental Education

Activities with children from local schools –
• Know your forest
• Workshop on seedling production for youth
• Training courses for teachers

Adult programs – Agriculture Extension
Program Highlights —
Week in Brazil’s **Iguaçu National Park**
- Half-million acres of Atlantic Rain Forest
- UNESCO World Heritage Site
- Proposed Trinational Biodiversity Corridor
Iguaçu National Parks – Brazil & Argentina

Week in Brazil’s Iguaçu National Park

• Park Conservation Science
• Biodiversity Corridor Management
• Park – Local Community Conflict

Endangered species conservation
• Jaguar, Tapir, Giant Anteater

Photos – G. Kittel, M. Thyssen, & IPÊ
Program Facilities —

Pontal do Paranapanema – Guesthouse, Morro do Diablo State Park
Program Facilities —

Iguaçu National Park –
Research Station
Instructional Staff —

Tim Kittel, PhD
• INSTAAR Research Ecologist —
  • Global Change Biology
  • Climate & Conservation
• Field Courses —
  • MRS Winter & Vegetation Ecology
  • Brazil Conservation Biology >15 yrs

Derek Sweeney, MSc
• EBIO GenBio Instructor
• GS Brazil since 2011

Rafael Chiaravalloti, PhD
• IPÊ Anthropologist —
  • Community Involvement in Conservation
  • Environmental Education
• Bilingual
Course components —

- Field & class exercises
- Research essays
- Individual project – Conservation plan
- No exams!

2 Years Later

Reforestation surveys

Forest Soil Analysis
Conservation Biology and Practice in Brazil’s Atlantic Forest

**Academics —**
~3 weeks: 13–30 May 2019
4 credits
EBIO/ENVS 4340/5340

**Meets Major Requirements —**
- EBIO 4000 & Lab/Field course
- ENVS Application course
- GEOG upper-division course & Physical Geography Track Elective
- IAFS Off-Campus Experience – Latin America
Conservation Biology and Practice in Brazil’s Atlantic Forest

**Eligibility Requirements** —

- Recommended class standing:
  Sophomore, by end Spring semester
- Minimum GPA 2.5
- Prerequisite:
  2000-level Natural Sciences course or in other field related to conservation & socioeconomic development
- No language requirement
- Requirement flexibility

**Graduating Senior Options** —

- Course on transcript post-graduation
- Summer graduation – to use financial aid
Conservation Biology and Practice in Brazil’s Atlantic Forest

More Info & On-line Application —
http://abroad.colorado.edu/?go=BrazilGS
Deadline – November 26
Rolling Acceptance – Apply early

Financial Aid Advising
Pre-departure Orientation

Questions? —
Scott Funk, Program Manager
  – Education Abroad, Center for Community
  – (303) 492-3403
  – scott.funk@colorado.edu
Dr. Tim Kittel, Faculty Director
  – kittel@colorado.edu
### 2019 Global Seminar Costs

**Program fee includes:**

- Instructional costs
- Housing & all meals
- Transportation between course sites
- Field trips
- Health insurance
- CU Ed Abroad Administrative fees

**Program fee does NOT include:**

- Round-trip travel to Brazil
- Passport/visa fees
- Vaccinations
- Personal expenses

<table>
<thead>
<tr>
<th>Education Abroad Budget</th>
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<tbody>
<tr>
<td>Instructional Costs</td>
<td>$5,089</td>
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<tr>
<td>Health Insurance</td>
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<td>Housing &amp; meals included in fee</td>
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<td>Education Abroad Program Fee</td>
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<td>Books &amp; Supplies</td>
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<td>Additional Meal Costs</td>
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<td>Airfare</td>
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<td>Estimated Costs not included in Program Fee</td>
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**Total Estimated Budget (resident)**

- $7,567

**Total Estimated Budget (non-resident)**

- $8,667
Financial Aid & Scholarships

• Residual aid from the academic year can apply to summer
  • Students taking at least 6 credits during the summer can now be eligible for a Summer Pell Grant

• Scholarships:
  • Buffs Abroad
  • Ed Abroad scholarships webpage
  • UROP
  • Videographer

Brazil
Photo: Jubilee Michael
Deadline

• Deadline is November 26\textsuperscript{th}!
• Rolling admission – apply early!
Global Seminar Application Process

Sign on today’s sign-up sheet:
check the “Start App” box to get your application open

Log on to:
http://abroad.colorado.edu
using your CU Identity Key and password
after you receive e-mail notification that your online application is open

Work on your online application from home
The application includes:
complete Abroad 101 (if you have not done so yet), professor or T.A. recommendation, personal statement, online forms, application fee

Speak with an education abroad advisor and/or with the program manager at any point in the process!
When your application is complete

Application Review & Interview

Due within one week of your acceptance:
Participant contract & non-refundable deposit

March/April: Post-acceptance paperwork, visas, Orientation Meeting, & preparation

GO!
Questions after today?

Connect with the Education Abroad office:
Center for Community (C4C) S355
Drop-in advising hours:
9-4:30 Mon-Fri
No appointment necessary

globalseminars@colorado.edu
303.492.7741

Contact the Faculty Director:
Tim Kittel
kittel@colorado.edu

Contact the Program Manager:
Scott Funk
Scott.Funk@colorado.edu
Thank you for coming!

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globalseminars@colorado.edu
C4C S355

abroad.colorado.edu

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