

TCD Research Methods – Fall 2004
LAS 6292 (Sect. 6816x)
Thursday, Periods 6-8 (12:50- 3:50)
376 Grinter Hall

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Office Hours:	Wednesday 9:00-11:00 am in 380 Grinter Hall or by appointment	Thursday 4-6 pm in Grinter 337 or by appointment

Main course objective:

Enhance knowledge and skills of research techniques for carrying out interdisciplinary, applied research in tropical conservation and development.

Required textbooks, available at Goering's Books and Bagels:

1. Bernard, H.R. 1995. Research Methods in Anthropology: Qualitative and Quantitative Approaches, 3rd edition. AltaMira Press, Walnut Creek, CA.

Assignments

Ordway Field Trip and Assignment
Draft of a research proposal
Peer-review of the three proposals
Stakeholder Report and Presentation
Final Research Proposal

Grading Criteria

Class attendance and Participation	15%
Ordway Trip and Assignment	10%
Draft of Proposal	15%
Peer Reviews	10%
Stakeholder report and presentation	25%
Final Proposal	25%

DATE	TOPIC	ASSIGNMENT DUE	NOTES
August 26	Introductions Applied Research Basics IRB / IACUC Proposal Assignment Stakeholder Assignment		
Sept. 2	Intro to Computer Lab Experimental Design / Stakeholder Analysis		
Sept. 9	Linking Theory and Methods / Interviewing, questionnaires, & informant recall		FIELD TRIP TO ORDWAY PRESERVE SEPTEMBER 11
Sept.16	<i>Guest Speaker: Tita Alvira</i> Participatory research / Ethnography / Time Allocation		
Sept.23	Species concepts Estimating biodiversity Value of Biodiversity / Ecosystem Services	ORDWAY FIELD ASSIGNMENT / PRESENTATION	
Sept.30	Overview of GIS / Ethnobiological Methods		
Oct. 7	<i>Guest Speaker: Chris McCarty</i> Social Network Analysis		
Oct. 14	Introduction to Peer Review & Evaluating Research Effective Presentations	DRAFT PROPOSAL	
Oct. 21	Population structure and abundance	PEER-REVIEW	
Oct. 28	No class: free day to work on stakeholder projects		
Nov. 4	Presentations of Group Project	STAKEHOLDER PROJECT	
Nov. 11	Veterans day Holiday		
Nov. 18	Harvesting of natural resources		
Nov. 25	Thanksgiving Holiday		
Dec. 2	Managing a research project Class evaluation	FINAL PROPOSAL & PROPOSAL PRESENTATION	

READING ASSIGNMENTS

Aug. 26: Introductions, Applied Research Basics. IRB/IACUC, Intro to Computer Lab

No readings

Sept. 2: Experimental Design, Proposal Assignment / Linking Theory and Methods

Meffe, G. K. and C. R. Carroll. 1997. What is conservation biology? Pages 3-27 in: *Principles of Conservation Biology* (2nd ed.). G. K. Meffe and C. R. Carroll (eds.). Sinauer and Associates, Sunderland, MA.

Smith, R. L. and T.M. Smith. 2001. "Ecology: Meaning and scope", Pages 2-18, In: *Ecology and Field Biology*. Addison Wesley Longman, Inc., San Francisco.

Scheiner, S. 2001. Theories, hypotheses, and statistics. Pp. 3-13 in: *Design and Analysis of Ecological Experiments*, S. M. Scheiner and J. Gurevitch (eds.). Oxford University Press, Oxford.

Krebs, Charles J. "Experimental designs" (Chapter 10)

Bernard Ch. 1-5

<http://irb.ufl.edu/irb02/index.html>

<http://iacuc.ufl.edu/>

Sept. 9: Interviewing, questionnaires, & informant recall

Bernard Ch.6-8, 13-15

Sept.16: Participatory Methods / Ethnography

Bernard Ch. 9-12

Sept.23: Species concepts, estimating biodiversity, value of biodiversity, ecosystem services

Meffe, G. K. and C. R. Carroll. 1997. The species in conservation. Pages 57-86 In: *Principles of Conservation Biology* (2nd ed.). G. K. Meffe and C. R. Carroll (eds.) Sinauer and Associates, Sunderland, MA.

Gaston, K. J. 2000. Global patterns in biodiversity. *Nature* 405: 220-227

Kremen C, N. M. Williams, R. W. Thorp. 2002. Crop pollination from native bees at risk from agricultural intensification. *PNAS* 99(26): 16812-16816.

Sept. 30: Overview of GPS/GIS

No readings

Oct. 7: Ethnobiological Methods

No readings

Oct. 14: Introduction to Peer Review & Evaluating Research / Effective Presentations

Rosenzweig, M.L., J.I. Davis, and J.H. Brown. 1988. How to write an influential review. Bull. Ecol. Soc. Amer. 69:152-155.

Lertzman, K. 1995. Notes on writing papers and theses. Bulletin of the Ecological Society of America, 76:86-90

Hess, G. R. & Leon H. Liegel. Creating Effective Poster Presentations. Created: January 2000. Last Update: January 2004. <http://www.ncsu.edu/project/posters/IndexStart.html>

Oct. 21: Population structure and abundance

Hall, P., & K. Bawa. 1993. Methods to assess the impact of extraction of nontimber tropical forest products on plant populations. Economic Botany 47:234-247.

Costa, F. and W. Magnusson. 2002. Selective logging effects on abundance, diversity, and composition of tropical understory herbs. Ecological Applications, 12: 807-819.

Foster et al. 1998. Rapid assessment of tropical plant communities using variable transects: an informal and practical guide. Available online at:

http://www.fimnh.org/research_collections/ecp/ecp_sites/rapidinventories/pdfs/VarTrans.pdf.

OPTIONAL BUT VERY USEFUL: Smith, Robert Leo and Thomas M. Smith. 2001. Sampling plant and animal populations (Appendix A, Pages 722 – 751), In: Ecology and Field Biology. Addison Wesley Longman, Inc., San Francisco.

Oct. 28: No class- free day to work on stakeholder projects

No readings

Nov. 4: Presentations of Group Project

No readings

Nov. 11: Veterans day Holiday

No readings

Nov. 18: Harvesting of natural resources

Olmsted, I., and E. R. Alvarez-Buylla. 1995. Sustainable harvesting of tropical trees: Demography and matrix models of two palm species in Mexico. *Ecological Applications* **5**:484-500.

Milner-Gulland, E. J., and H. R. Akcakaya. 2001. Sustainability indices for exploited populations. *Trends in Ecology & Evolution* **16**:686-692.

OPTIONAL: Peters, Charles M. Sustainable use of nontimber plant resources in tropical moist forest: an ecological primer. Biodiversity Support Program, Washington DC

Nov. 25: Thanksgiving Holiday

No readings

Dec. 2: Managing a research project / Class evaluation

Colvin, Jean G. 1992. A code of ethics for research in the third world. *Conservation Biology* **6**(3): 309-311

Spear, J. R. 2004. Minimum impact research. *Conservation biology* **18**: 861.

University of Florida Policies

Honesty:

As a result of completing the registration form at the University of Florida, every student has signed the following statement: "I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University."

UF Counseling Services:

Resources are available on-campus for students having personal problems or lacking a clear career and academic goals which interfere with their academic performance. These resources include:

1. University Counseling Center, 301 Peabody Hall, 392-1575, personal and career counseling;
2. Student Mental Health, Student Health Care Center, 392-1171, personal counseling;
3. Sexual Assault Recovery Services (SARS), Student Health Care Center, 392-1161, sexual counseling; and
4. Career Resource Center, Reitz Union, 392-1601, career development assistance and counseling.

Software Use:

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate.

Disabilities Accommodations:

Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.