Indiana University

Prof. Emilio F. Moran | Mon 1:30-4:00 pm

Fall 2009 | Student Building 159

G515 & E620

RESEARCH DESIGN IN HUMAN ENVIRONMENT RESEARCH

Goals:

1. Prepare a competitive research proposal that can be submitted to an agency or foundation for doctoral dissertation research. To do so multiple drafts will be written, submitted, reviewed and resubmitted as part of developing a competitive proposal.

2. The course will cover every step of the proposal writing process. Students will become familiar with major funding agencies, and their diverse ways of announcing funding opportunities, and the procedures and style that are unique to some of the major ones.

3. Understand how social scientists and environmental scientists reconcile their traditional methods of site-specific research with the demands placed upon them by agendas that expect research to have broader significance. The course reviews the methodologies used by social scientists and ecologists. Student projects for their dissertations can and should focus on the planned dissertation topic, as should the proposal developed during the course.

4. Understand how review panels are constituted, how the review process works, and how to engage in the process of revise and resubmit in order to be responsive to reviewers and address limitations of submitted proposals and constantly improve them.

Required books:

Friedland, A.J. and C. Folt, 2009. *Writing Successful Science Proposals*. Second Edition.

New Haven: Yale University Press.

Liverman, D. et al. 1998. *People and Pixels: Applications of Remote Sensing in the Social Sciences*. Washington DC: National Academy Press. (Will be provided to you by the instructor)

L. F. Locke, W.W. Spirduso, S.J. Silverman, 2007, Proposals that Work: A Guide for Planning Dissertations and Grant Proposals. 5th edition. Sage Publications.

Further Readings, on reserve at Geography Library, Student Building basement

Assignments:

This course requires

1. one final seminar oral presentation (20% of final grade);
2. one "intent to submit proposal" (a 2-3 pp. pre-proposal) [20% of final grade];
3. three drafts of the preliminary proposal (10% each or 30% together);and
4. the completed final research proposal (30% of final grade), due at the end of the course, which should be treated as a real submission to NSF, NASA, NOAA or some other funding agency (SSRC, Fulbright, NIH, OAS, etc).

The final submission, and the 3 preliminary drafts, should be submitted as a portfolio with all previous versions and guidelines attached so that the instructor can evaluate progress over the course of the semester, and how well they meet the guidelines.

Each draft should be accompanied by the previous draft with my corrections to assess how well you addressed problems identified in the previous draft. In fact, each draft (second, third and final) must be accompanied by a one or two page "response to the reviews" where you address what you did to respond to the specific suggestions in the last draft. This is fairly customary in several grant agencies, and even when not required, it is a good idea to send it to the Program Officer, as a way of showing intent to be responsive.

Evidence of having completed the readings for the week is expected-- through

questions and active engagement in ideas.

For the in-class presentation a presentation of 20 min. is expected with 10 additional minutes being comments from seminar members to the speaker. These comments should also be written in situ and given to the speaker to help them prepare the final draft of the proposal.

Examples of the pre-proposal will be distributed as models, and examples of successful research proposals will be placed on reserve at the library.

Each student will prepare a research proposal which may address global environmental change issues or focus on the topic of their dissertation, if different from that. This will provide practice for proposals to be submitted to funding agencies, for which you should get used to talking to the Program Officer before submitting. The proposal will follow all criteria outlined by an agency specified in the proposal. If you have no idea, choose NSF guidelines in your area of interest, as your guide since they are pretty specific and covers most disciplines including education.

About the Instructor:

Prof. Emilio F. Moran is Distinguished Professor and Rudy Professor of Anthropology, Professor of Environmental Sciences in SPEA, Adjunct Professor of Geography, and Director of the Anthropological Center for Training and Research on Global Environmental Change at Indiana University. He is the author of 8 books, 14 edited volumes and more than 140 journal articles and book chapters. He is the past President of the Section on Anthropology and the Environment of the American Anthropological Association and past Chair of the Anthropology Section at the Amer. Assoc. for the Advancement of Science and past Chair of the Anthropology Department. His primary research area is the Amazon Basin and issues of land use and land cover change, resource management, and

agroecology. He has also studied resettlement and migration, development, and has a persistent interest in research methods. His work has been funded by SSRC, Fulbright, Wenner-Gren, NSF, NASA, NIH, NIGEC, NOAA and other agencies. He has served on the NSF panel on Cultural Anthropology and on the panel on Biodiversity and Conservation at NSF. He completed a four year term as a member of NIH's panel (called "study group") on Studies of Population.

Office Hours:

Mondays 9 am - 12:00 noon (or by appointment by calling 855-6182)

Office: Student Building 240

Email: moran@indiana.edu

SYLLABUS

Most of the readings can be found in the Geography Library, on reserve. The *People and Pixels* book is being provided to you at no cost if the subject is of personal interest. Please acquire the other two required books from the bookstore or from online sources. The instructor may add or change some of the readings during the semester as needed or appropriate.

Week 1 (Aug. 31) Introduction to the course

A. Discussion of course requirements and syllabus.

B. Why writing a research proposal is one of the most exciting things one does as a scholar....

C. Introduction to research design:

a. Title and project summary

b. definition of problem and hypotheses

c. significance

Readings for this week:

Freedland and Folt, *Writing Successful Science Proposals*, chapters 1 to 6,

Locke et al, *Proposals that work*, chapter 1

Optional reading for those interested in GEC:

Chapter 7 "Human Dimensions" of *Global Environmental Change: Research Pathways for the next Decade* book.

Chapter 1 of *People and Pixels* book "Linking remote sensing and social science: the need and the challenges"

***You will find it very useful and informative to attend the following workshop. Please **attend in lieu of the class cancelled Oct. 12**

Fulbright US Student Program Workshop (IIE/US Dept of State grants)
Information Session
September 4
Conference Rm, 201 N. Indiana
1-5 pm
Application deadline: September 14

Week 2 (Sept. 7), (Labor Day, we *do* have class). No office hours today.

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Visiting Speaker: Mr. Fogleman, Program Officer for the Fulbright Program at IU will share his experience and suggestions on how the programs work, and how to best prepare your proposals for each of the two programs

The workshop below is for the other Fulbright program you can apply for, and has very different requirements than the other one.... Attend in lieu of the class cancelled Nov. 2.

Fulbright-Hays Grants for Doctoral Dissertation Research Abroad (US Dept of Education grants)
Information Session
TBA, most likely in Mid-October
Application deadline: Late October or early November (to be announced)

Readings:

Freedland and Folt, *Writing Successful Science Proposals*, ch. 7-13

Locke et al, *Proposals that work*, chapters 3 and 4

Week 3 (Sept. 14)

Introduction to Research Design:

a. literature review and how to link to problem driving the proposal
b. theory and method links.
c. Methods
d. Timeline
e. Budget

Readings:

Friedland and Folt, *Writing Successful Science Proposals*, ch. 14 and 15

Locke et al. Proposals that work, chapters 5, 6, and 7

Optional reading for those interested in GEC:

People and Pixels, selected chapters

Week 4 (Sept. 21)

Research Design:

a. First run through in class (so be prepared!!) of your statement of problem, goals, and significance. Come with these parts written out and enough copies to share with class members.
b. Discussion of the intent to submit proposal format and objectives

NEXT WEEK IS THE DEADLINE FOR THE "INTENT TO SUBMIT PROPOSAL" WHICH INCLUDES A BRIEF BUT COMPELLING STATEMENT OF THE TOPIC OF THE PROPOSAL YOU PLAN TO SUBMIT ACCORDING TO THE GUIDELINES. PLEASE ALSO ATTACH A PRELIMINARY BIBLIOGRAPHY TO ENSURE YOU ARE ON YOUR WAY TO COMPLETING THE PROJECT. Also include the guidelines of the agency of your choice to ensure that you have met their requirements. If the agency you are choosing does not require an intent to submit proposal preliminary step, use the guidelines of NIGEC for the purpose of this experience. **DEADLINE: Sept. 28** during class, but you are encouraged to turn in earlier, if possible, and to have discussed with the instructor the basic research questions at the heart of the proposal planned to be the project for this course, and for later submission to agencies.

Week 5 (Sept. 28) .

Research Design:

a. Preparing the Proposal First Draft
b. Steps in assembling the first draft: defining the central question, defining the associated questions, the methods to be used, the literature to be reviewed and the significance. The first draft must include a bibliography (cited references), and an

abstract. Everything but the budget.

Remember: you must follow the guidelines of one agency or foundation to the letter, and if you have not chosen one, then follow NSF's guidelines for the section or division relevant to your discipline or interests. Include these with the first draft, and in subsequent drafts.

Readings: Locke et al., *Proposals that Work*, Review again chs. 4-7

Friedland and Folt, *Writing Successful Science Proposals*, Review again chapters 3-12

Week 6 (Oct. 5)

Visiting Speaker: Moira Smith, subject librarian for anthropology at IUB, will come to the Seminar and conduct a hands-on session in which she will help you search for databases on your particular topic. Bring your laptops to class that day, so that wirelessly you can each be guided through by Moira.

Readings: *Proposals that Work*, chapters 8 and 9

Week 7 (Oct. 12) No class today, work on the First Draft of your proposal due Oct. 19
No office hours today
You should have attended the first Fulbright Workshop in lieu of this class meeting!

Readings

Proposals that Work, ch. 2

Friedland and Holt, ch. 18, both on ethics of research, in preparation for next week's speaker.

Notice the instructions below, for you to download and fill forms on human

subjects ahead of Oct. 19 so you can ask specific questions from the speaker.

First Preliminary draft of research proposal due to instructor at start of class. Deadline: Oct. 19

Week 8 (Oct. 19)

Visiting speaker: Danielle Gunkel, Assistant Director for Human Subjects at IUB, She will discuss preparing the human subjects form for review by the IRB Committee to obtain permission to work with human subjects, required by all agencies and the University. In preparation for her visit, She will also discuss the process of review of your application, and the ethical issues the Human Subjects Committee is concerned about.

read the on-line tutorial (the social/behavioral one and take the test before class, so you can have questions for her
http://www.indiana.edu/~rcr/index.php get the basics of "why" from that. She can answer questions about the tutorial or any questions on the test during class

Download the forms requesting human subjects research authorization and fill in advance so you can ask useful questions, this will help you fulfill your assignment for the course that includes filling these forms correctly.

Week 9 (Oct. 26)

The NIH as a source of funds and the strong differences in the review process. The instructor who served four years in one of the panels will discuss the unique characteristics of proposals and review process at NIH

Readings:

Friedland and Folt, *Writing Successful Science Proposals*, ch. 15-17

More on the next pg.

Appendix A, of *People and Pixels book*

Proposals the work, Appendix, proposal 1 and 2.

Week 10 (Nov. 2) No class this week—focus on preparing the Second Draft of the Proposal, due Nov. 12 in my mailbox. No office hours today.

You should have attended the second Fulbright Workshop in lieu of this class meeting!

Week 11. (Nov 9)

The NSF dissertation improvement grant (DDIG) experience

Visiting speaker: Eduardo Brondizio, has served on the NSF Panel on Dissertation Improvement Grants, he will share lessons learned while serving on the NSF dissertation panel

Reading: Deborah Winslow, Anthropology Newsletter (to be distributed to class)

Appendix in *Proposals that work*: proposals 3 and 4.

Second Preliminary draft of research proposal due to instructor

Deadline: November 12

Week 12 (Nov. 16)

Research Design:

a. Choice of methods and expected results in research design.
b. Discussion of Existing Data and Data Needs.
c. Members of class will outline the key research questions, methods and significance in 5 or no more than ten minutes

Week 13 (Nov. 23)

Research Design:

a. Discuss Revising and resubmitting a proposal.
b. Responding to the reviews.
c. Preparing a letter with the resubmission.

Reading:

Locke et al. Proposals that work, chapter 7, "the oral presentation", review again carefully!

Third Preliminary draft of research proposal due to instructor Deadline: November 23

Turning it in at the start of the class. This should be a complete proposal including the second budget draft, human subject forms, and the response to reviews from the second draft. Don't forget to include drafts 1 & 2 as well!

Week 14 (Nov. 30).

Class cancelled Nov. 30 and presentations rescheduled for Dec. 6, from 2 to 5 pm, room 159 SB

Week 15 (Dec. 7)

Continuation of class Presentations by Members of the Class, to get feedback from the whole class and instructor on the proposal before preparing the final version. At the session, provide a one-page summary of the proposal and give a 20 minute presentation of the highlights of the topic, main theoretical contributions, methods to be used, and significance.

There is no Final Exam.

FINAL RESEARCH PROPOSALS ARE DUE NO LATER THAN DEC. 11
in my mailbox by 4 pm. at Student building 130 or ACT main office.

Make sure to include all previous drafts of the proposal to form a portfolio that transparently allows the instructor to see the progress in the quality of the proposal! Don't forget to include the foundation or agency's proposal guidelines. Late proposals will be automatically graded down one letter grade to ensure fairness in grading to those who turned them in on time. Remember that often late proposals are not even reviewed in the real world of funding, so begin here getting used to turning it in on the deadline, or earlier, warts and all. All parts must be included: cover sheet, text according to guidelines of agency, budget, human subjects form, bibliography, your CV, and any other attachments required by agency (e.g. NSF requires CV of your supervisor, and yes, you must ask your advisor for it, or if available online in his/her page downloaded).

This is a REAL experience. Expect to get an NSF ranking sheet with a score and comments, just like you might get from a real submission!!!

Course Guarantee:
I will work with you even after the course to help you with your grant submission for your dissertation research.... I want to see each and every one of you funded for your dissertations!
