

LALS 100A & 100L: Social Science Analytics UC Santa Cruz, Winter 2013

Flora Lu, Associate Professor
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Lecture Location: Classroom Unit 1
Lecture: Tues. & Thurs. 4:00-5:45pm
Sections: M 12:30-1:40pm Crown 208; W 9:30-10:40am Baskin 372; W 2:00-3:10pm Crown 208; TH 10:00-11:10am Cowell 134

Teaching Assistants: Karina Cervantez (kcervant@ucsc.edu); Brent Crosson (jcrosson@ucsc.edu)

Course Description and Objectives

One of the most nurturing and generous benefits that comes when we engage in critical thinking is an intensification of mindful awareness which heightens our capacity to live fully and well. When we make a commitment to become critical thinkers, we are already making a choice that places us in opposition to any system of education or culture that would have us be passive recipients of ways of knowing. As critical thinkers we are to think for ourselves and be able to take action on behalf of ourselves...When we accept that everyone has the ability to use the power of mind and integrate thinking and practice we acknowledge that critical thinking is a profoundly democratic way of knowing...All genuine learning requires of us a constant open approach, a willingness to engage invention and reinvention, so that we might discover those places of radical transparency where knowledge can empower.

--bell hooks (2010)

This is a core course for students in Latin American and Latino Studies, and it emphasizes a Social Science approach in comparison to LALS 100B, which has a Humanities perspective. We focus primarily on critical thinking, complex reasoning, analytical and research skills, and honing written communication--key abilities that are required in a rapidly changing economy and society. In this course we primarily emphasize both knowledge consumption and production, and secondarily apply lessons learned to examine topics in education and issues of livelihoods and sustainability in Latin America.

Course Objectives

1. Develop or hone critical thinking and analytic skills;
2. Gain expertise in crafting a research proposal;
3. Become familiar with the method of surveys;
4. Improve written and oral communication skills;
5. Apply critical thinking and complex reasoning skills to real world concerns.

Course Skills

In order to meet Objective 1, you will be able to:

- Distinguish between argument and evidence and elucidate ways in which they can be used to reinforce or counter a particular stance;
- Identify the premises, assumptions, and conclusions of an argument, and how valid and sound they are;
- Differentiate between inductive versus deductive reasoning;
- Evaluate the rigor of various sources of information and differentiate between primary versus secondary information;
- Identify faulty reasoning and other common obstacles to critical thinking.

In order to meet Objective 2, you will be able to:

- Devise solid research questions and falsifiable hypotheses;

- Understand the importance of conceptualization and operationalization;
- Come up with a research design, including sub-questions, hypotheses (as appropriate), objectives, methods, and significance;
- Write a literature review to contextualize your research question and identify gaps in current understanding.

In order to meet Objective 3, you will be able to:

- Explain the advantages and drawbacks of survey methodology;
- Analyze and interpret survey data;
- Develop a survey.

In order to meet Objective 4, you will be able to:

- Link critical thinking to critical writing, where you shift from engaging in an internal/mental critique of the efficacy of arguments to an ability to present effective arguments to others;
- "Think on your feet" by expressing your analyses or critiques orally in section or class;
- Cogently present the results of survey data analysis to your peers;
- Appreciate the value of writing multiple drafts of assignments, and seeing writing as a process of exploration and solidifying knowledge rather than a chore.

In order to meet Objective 5, you will be able to:

- Critically assess claims being made about higher education being "academically adrift";
- Better understand issues pertaining to sustainability, livelihoods and agroecology in Latin America.

What is LALS 100L? This is an optional 2-unit writing lab. Students in LALS 100L do the same coursework as those in 100A, but with an additional focus on their four writing assignments. This includes: (1) required weekly discussion section with undergraduate writing instructors, and (2) submission of drafts of the four 100A writing assignments to the writing instructors for comments one week before they are due. Students should sign up for LALS 100L within the first week of the class (by January 11th).

Course Format and Expectations

This course will be comprised of lectures, discussion, interactive class activities, and sections. Your consistent attendance and participation is required in both lecture and sections. Failure to attend class and section on a regular basis will lead to a poor course grade. You must come to class having done the readings assigned for that day. This course is very demanding and it is important to keep up with readings and assignments the entire term.

Chapters, articles, and online materials constitute the reading for the course. Articles and chapters are available as a course reader available for purchase from the Literary Guillotine (204 Locust Street, downtown Santa Cruz, 457-1195, M-Sat 10:00am-6:00pm). The course reader is **required** for purchase, and you should bring it to every class meeting. Although it is inconveniently located off campus, the Literary Guillotine is an independent bookstore and one of the most inexpensive sources for course readers.

There are a few **optional** books available for purchase at Bay Tree Bookstore, for those of you interested (we use selected chapter(s) of these books):

A. Arum and J. Roska. 2011. *Academically Adrift: Limited Learning on College Campuses*. Chicago: University of Chicago Press.

L. Vaughn. 2010. *The Power of Critical Thinking: Effective Reasoning about Ordinary and Extraordinary Claims*. New York: Oxford University Press.

Course Components and Grading

Your grade will be determined as follows:

Component		Points Earned	Maximum Points
In-Class Quizzes	10 quizzes, 5 points each, cannot be made up		50
Written Assignments (2-5 pages each, depending on assignment)	First critical thinking assignment = 25; Individual assessment of <i>Acad. Adrift</i> survey = 25; Second critical thinking assignment = 25; Literature review for proposal = 25		100
Section	Attendance and participation = 25; exercises = 75 (10 points each for five exercises, 10 points for survey presentation, 15 points for collective lit review).		100
Research Proposal (10-12 pages)	Quality of documentation = 20; thorough, thoughtful analysis = 30; writing quality = 20; cohesion and rigor of research design = 30.		150
Midterm Exam	Understanding of course material = 40; integration and synthesis of course concepts = 35.		100
	TOTAL POINTS		500

Grade	Points	Grade	Points	NOTE
A+ (100+%)	501-510	B- (75-79%)	375-399	For extraordinary effort, 5-10 extra points will be awarded
A (95-100%)	475-500	C+ (70-74%)	350-374	
A- (90-94%)	450-474	C (60-69%)	300-349	
B+ (85-89%)	425-449	D (50-59%)	250-299	
B (80-84%)	400-424	F (<49%)	0-249	

There are *10 in-class quizzes* designed to test your completion and understanding of the reading for that day. The quiz can be given at any point during the class. Each of these quizzes is worth 5 points, and they cannot be made up.

There are *four written assignments* (not to be confused with exercises given in section), each worth 25 points. They should be formatted as follows: 1.5 spaced, 10-11 point font, Times New Roman, 1" margins, and printed double sided if possible. With each day that an assignment is turned in late, it will be docked 5 points.

1. First critical thinking assignment: this assignment focuses on taking apart various elements of an argument and assesses familiarity with concepts presented at the beginning of the course (~2 pages).
2. Assessment of the *Academically Adrift* survey data: early in the quarter, students will anonymously fill out a survey pertaining to their demographic background and educational experience. This data set will be the basis for a group exercise undertaken in section in which students collectively analyze these data in light of recent claims (e.g., in the book *Academically Adrift*) about higher education. For this assignment, each student is responsible for a descriptive analysis of the data and critical assessment of their meaning (~2-3 pages).

3. Second critical thinking assignment: this assignment focuses on taking apart various elements of an argument and assesses familiarity with concepts presented at the beginning of the course (~2 pages).
4. Literature review (as part of your research proposal): in both lecture and section, we will be talking about literature reviews--what they are, the role they play in a proposal (or even just on their own), and how to do them. For the specific topic and question(s) of your research proposal, you will write a 3-page literature review drawing from sources listed in your annotated bibliography.

In *section*, you will discuss material from lectures and readings, will get help with the assignments (in particular the research proposal), and will undertake two collective endeavors. Section attendance and participation is mandatory. Through peer-to-peer learning, you receive feedback on your proposal through *five exercises* that take you step by step through this assignment (topic/question/rationale; problem statement; annotated bibliography; research design; methods). In addition, the section as a whole will work together on two tasks: first, to analyze and present a selection of their choosing of the *Academically Adrift* survey data; and second, to undertake a literature review using a bibliography that will be provided.

The *midterm exam* is in-class, and will consist of exercises and multiple-choice, T/F, and fill in the blank questions. If you have a legitimate excuse for missing an exam (e.g., serious illness, accident, family or personal emergency), you have to notify the professor at least 24 hours in advance to be eligible for a make-up exam.

The research proposal (1.5 spaced, 10-11 point font, Times New Roman, 1" margins, and printed double sided if possible) is worth 20% of your grade and constitutes the final for the course. It should be between 10-12 pages in length and is due during the final exam period for this class, Wednesday, March 20th from 12-3pm in Natural Sciences II, room 479. Late proposals will not be accepted.

All of your submitted writings must be your own original work. You must acknowledge any borrowing of ideas and words from others by including parenthetical references (e.g., (author year) or (author year: page) if quoting) and a bibliography. For help on citations for the bibliography, please use American Anthropological Association format, available at <http://uweb.txstate.edu/~rw04/anthropology/info/theory/long-style-guide.htm>. Keeping track of the sources you use and using a consistent style of documentation will help you avoid unwittingly committing plagiarism. Plagiarism is intellectual theft and fraud. Examples of plagiarism include buying papers from the Internet or other sources; downloading materials from the Internet and passing it off as your own writing or using any part of it without acknowledging the source; taking published ideas of others and passing them off as your own.

Please also familiarize yourself with UCSC's policy on the unauthorized sale of course notes, available at: <http://news.ucsc.edu/2010/11/course-notes-notehall.html>.

If you qualify for classroom accommodations because of a disability, please get an Accommodation Authorization from the Disability Resource Center (DRC) and submit it to me in person outside of class (e.g., office hours) within the first two weeks of the quarter. Contact DRC at 459-2089 (voice), 459-4806 (TTY), or <http://drc.ucsc.edu> for more information on the requirements and/or process.

Course Schedule

Class #1: Tuesday, January 8, 201

Introduction to the Course and Crafting Research

Readings:

P. Tyre. 2012. "The writing revolution." *The Atlantic* October 2012: 96-101.

W.C. Booth, G.G. Colomb and J.M. Williams. 2008. *The Craft of Research*. Chicago: University of Chicago Press. Chapter 3: "From Topics to Questions." pp. 35-50
D.B. Smith. 2011. "The university has no clothes." *New York Magazine*: May 1, 2011. Available at: <http://nymag.com/news/features/college-education-2011-5/>

Part One: Knowledge Consumption and Foundations of Critical Thinking

Class #2: Thursday, January 10, 2013

Predictably Irrational, Uncritical, Simplistic
Critical Thinking Assignment #1 handed out

Readings:

Selection from D. Ariely. 2009. *Predictably Irrational: The Hidden Forces that Shape Our Decisions*. New York: Harper. Chapter 6: "The Influence of Arousal" and Chapter 7: "The Problem of Procrastination and Self Control." pp. 119-166.

L. Vaughn. 2010. *The Power of Critical Thinking: Effective Reasoning about Ordinary and Extraordinary Claims*. Chapter 2: "Obstacles to Critical Thinking." pp. 35-54.

Class #3: Tuesday, January 15, 2013

What is critical thinking?

Readings:

L. Vaughn. 2010. *The Power of Critical Thinking: Effective Reasoning about Ordinary and Extraordinary Claims*. New York: Oxford University Press. Chapter 1: "The Power of Critical Thinking." pp. 3-22.

W.C. Booth, G.G. Colomb and J.M. Williams. 2008. *The Craft of Research*. Chicago: University of Chicago Press. Chapter 4: "From Questions to a Problem." pp. 51-67

Class #4: Thursday, January 17, 2013

Faulty Reasoning

Readings:

L. Vaughn. 2010. *The Power of Critical Thinking: Effective Reasoning about Ordinary and Extraordinary Claims*. New York: Oxford University Press. Chapter 5: "Faulty Reasoning." pp. 176-202.

Class #5: Tuesday, January 22, 2013

Analyzing Arguments

Readings:

L. Vaughn. 2010. *The Power of Critical Thinking: Effective Reasoning about Ordinary and Extraordinary Claims*. Chapter 3: "Making Sense of Arguments." pp. 67-112.

Class #6: Thursday, January 24, 2013

Analyzing Arguments, cont'd

Readings:

L. Vaughn. 2010. *The Power of Critical Thinking: Effective Reasoning about Ordinary and Extraordinary Claims*. Chapter 4: "Reasons for Belief and Doubt." pp. 123-162.

Class #7: Tuesday, January 29, 2013

Midterm Review

Critiquing a Journal Article

Critical Thinking Assignment #1 Due

Reading:

B.D. Jokisch. 2002. Migration and Agricultural Change: The Case of Smallholder Agriculture in Ecuador. *Human Ecology* 30(4): 523-550.

Class #8: Thursday, January 31, 2013

IN CLASS MIDTERM

Part Two: Knowledge Production and Applications

Class #9: Tuesday, February 5, 2013

Participatory Action Research in Latin America

Guest Lecture: Heather Putnam, Associate Director, Community Agroecology Network (CAN)

Readings:

Bacon, C., V. E. Mendez, and M. Brown. 2005. Participatory action research and support for community development and conservation: examples from shade coffee landscapes in Nicaragua and El Salvador. Center Research Brief #6. Santa Cruz, CA: Center for Agroecology and Sustainable Food Systems, University of California, Santa Cruz.

R.K. Schutt. 2004. *Investigating the Social World: The Process and Practice of Research*. 4th Edition. Thousand Oaks: Pine Forge Press. Chapter 1: "Science, Society and Social Research," pp. 1-26.

Class #10: Thursday, February 7, 2013

The Survey as a Methodological Tool

Discussion of Midterm

Design Mid-quarter Course Evaluation

Readings:

R.K. Schutt. 2004. *Investigating the Social World: The Process and Practice of Research*. 4th Edition. Thousand Oaks: Pine Forge Press. Chapter 8: "Survey Research," pp. 227-245.

Class #11: Tuesday, February 12, 2013

Literature Reviews

Mid-quarter Course Evaluation

Readings:

M.L. Patten. 2005. *Understanding Research Methods*. 5th Edition. Glendale, CA: Pyrczak. (Topics 16 & 17)

M.L. Pan. 2004. *Preparing Literature Reviews*. 2nd Edition. Glendale, CA: Pyrczak. (Chs. 8 and 9)

Class #12: Thursday, February 14, 2013

Students share: The applicability of Arum & Roska's (2011) findings to UCSC

Readings:

R. Arum and J. Roksa. 2011. *Academically Adrift: Limited Learning on College Campuses*. Chicago: University of Chicago Press. Chapter 3: "Pathways through Colleges Adrift." p. 59-89.

Class #13: Tuesday, February 19, 2013

Discussion: Academically Adrift?

Academically Adrift Survey Assignment due

Assign Critical Thinking Assignment #2

Readings:

<http://www.ideasinactiontv.com/episodes/2011/05/academically-adrift-how-college-students-and-professors-arent-making-the-grade.html>

<http://chronicle.com/article/What-Spurs-Students-to-Stay-in/129670/>

Class # 14: Thursday, February 21, 2013

Research Design

Readings:

A selection of top student proposals from LALS 100A in Winter 2012 (names redacted):

"Implications of Military Enforced Residential Evictions on Rio de Janeiro *Favela* Residents"

"US Immigration Policies: Its Effects on Mortality Rates among Immigrants"

"Influence of Masculinity and *Machismo* on the Health Decisions of Latino Male Migrant Farmworkers"

"Perception of Safety among Female UCSC Students of Color"

"The Influences of Housing (in)security and Hip-Hop on Contemporary Afro-Colombian Identity"

Class #15: Tuesday, February 26, 2013

Methodologies

Reading:

H.R. Bernard. 2011. Interviewing I: Unstructured and Semistructured. In *Research Methods in Anthropology*. 5th Edition. Lanham, MD: Altamira Press. Pp. 156-186.

A.J. Umana-Taylor and M.Y. Bamaca. 2004. Conducting focus groups with Latino populations: Lessons from the field. *Family Relations* 53(3): 261-272.

Class #16: Thursday, February 28, 2013

Example of a Social Science Approach: Dr. Lu's Research in the Amazon

Literature Review Due

Reading:

F. Lu and R.E. Bilsborrow. 2011. "A Cross-Cultural Analysis of Human Impacts on the Rainforest Environment in Ecuador," in Cincotta, R.P. and L.J. Gorenflo (eds.), *Human Population: Its Influences on Biological Diversity*. Berlin: Springer Verlag. Pp. 127-151.

Class #17: Tuesday, March 5, 2013

Sections Share: Sustainability, Agroecology, and Livelihoods in Latin America: What does the research say?

Class #18: Thursday, March 7, 2013

Critical Thinking in the Real World

Guest Lecturer: John Leake

Readings:

<http://www.coldalongtime.com>

Class #19: Tuesday, March 12, 2013

Panel of Proposals

Critical Thinking Assignment #2 due

Class #20: Thursday, March 14, 2013

Course Summary

Final Research Proposals due Wednesday, March 20, 12:00-3:00pm in Nat Sci II Room 479.

In my life, writing has been an important exercise to clarify what I believe, what I see, what I care about, what my deepest values are. The process of converting a jumble of thoughts into coherent sentences makes you ask tougher questions.

--Barack Obama (2012)

Format for a Research Proposal

Your proposal should be 10-12 pages maximum, 10-11 pt font, 1" margins, 1.5 spaced, Times New Roman). It is due during the final examination period for this class, Wednesday, March 20th, before 3:00pm. Pithy summary statements, underlining, and the use of headings and subheadings help the reader of your proposal.

I. Title Page, Abstract, and Keywords

On the title page, start with the title of the proposal, your name, the course and term, and the date. On the same page right below, give an abstract of the proposal, which is a terse summary of the major sections of the proposal: the problem, fundamental question, the objectives and methods, and the significance. It should be no more than 250 words. Paraphrase in broad but accurate statements, avoid jargon, and write so that the layperson can follow and understand the work. At the end of the title page, give 3-5 keywords.

II. Problem Statement

Convince the reader that the problem is important, that it has generality, and that its study will contribute to our understanding. How does the study build on old or contribute to new ideas? What pressing problems or challenges does it address? Give one of two concrete instances. Do not be too grandiose or general; assume reader interest and some familiarity with the area. After stating the problem to be addressed, give the fundamental question to be addressed by the proposal (you may want to italicize or underline it for emphasis). Following this, a brief sketch (no more than a short paragraph) or the approach you intend to take, and its merits (one which foreshadows the remainder of the proposal) is useful. This can outline and integrate the proposal for the reader.

II. Literature Review

In this section you would normally demonstrate command of the current state of the field, and indicate how the proposed research advances it. For your assignment, this will mean reference to 5-7 sources that you have read (but not the usual broad survey and review expected of a scholar devoting him- or herself to a subject area). Discuss the related research in enough detail that a non-specialist will appreciate their relevance. Your proposed study's contribution to knowledge and the ways in which the present study moves beyond existing knowledge should be stated. This section will be judged on its ability to evaluate and synthesize existing and proposed work.

III. Research Design

Here, reiterate your fundamental question from Section II, and then break it down to a series of sub-questions that are listed in a logical and sequential order. If you have a basis for prediction, you can address the fundamental question as testable hypotheses; if the research is exploratory or a survey, use subquestions. For each subquestion or hypothesis, state specific objectives that you will undertake to address or answer it; normally there are around 2-3 objectives. Each objective should mention the use of a methodology and be framed as a concrete, doable task. Be as explicit as possible. Give the reviewer a basis for judging the eventual completeness and success of the work. This section shows your "plan of attack" for getting at your broad, fundamental question: your deconstruction of the fundamental question into smaller subquestions (or hypotheses) demonstrates the logic behind your research design. The specific research objectives link these to the methods, discussed next.

IV. Methodology

Here the research must be described in down-to-earth, operational terms. Begin with a one paragraph summary or overview. Note that the following subsections have an experimentalist bias, which may or may not be appropriate to your problem; adopt and adapt as fits your project. For example,

ethnography (the study of a culture of a group of people) typically is less formally organized and precise than laboratory research.

Population and sample. Describe the population under study and the size and choice of the sample to be picked. Justify how the sample is sufficient (and appropriate) for answering the questions or testing the hypotheses.

Methods to be used. Explain the methods that were just mentioned in Section III in the objectives. For example, if you are using interviews, specify what kind (structured, semi-structured, open-ended?) and how you intend to conduct the interviews.

Data collection. Define your variables, and indicate how they will be measured and recorded: this process is known as operationalizing the variables. What kind of data do you intend on collecting, and mention what kind of instrumentation or equipment might be needed.

Analysis. Show that the analytical methods are consistent with the objectives and design, that all data are to be used, and that all objectives can be met with that data. Analysis should touch on any statistical techniques to be used, computer programs, etc. (I understand that many of you may not have a familiarity with statistics, but discuss here how you would go about trying to analyze the data as best you can).

Limitations. All proposed research projects have limitations because you cannot address everything; because of limits in time, energy, people power, money; and because there may be logistical or ethical limitations in being able to get your ideal set of data.

V. Importance

Argue for their importance, as a contribution to theory and concepts, general knowledge, or practical concerns. It is not enough to just fill holes in the literature; you will want to show how your study will advance understanding.

VI. References Cited

Don't forget your references! Please use the American Anthropological Association Style Guide, available at: <http://uweb.txstate.edu/~rw04/anthropology/info/theory/long-style-guide.htm>

Format for a Journal Article Critique¹

Purpose: What is the central aim or purpose of the article? What is it trying to accomplish?

Concepts: What are the main ideas, thoughts, or notions in the article?

Questions: What are the questions being raised in the article? What did the author(s) seek to answer?

Information/Data: What information was used to address these questions or support the claims? How was this information gathered? Do the methods appear sufficient/appropriate?

Inferences/Conclusion: What is the conclusion of the article? How did the author(s) reach the conclusion? Is there another way to interpret this information?

Assumptions: What is the author taking for granted? What assumptions lead to the conclusion?

Point of View: What is the point of view of the author(s) in looking at this issue? Is there another point of view worth considering?

Implications: What are the larger implications of this article for Ecology, science, society, etc.?

A strong journal article possesses:

Clarity: it is not necessary for the reader to wonder or guess what the authors are trying to say. There are needed explanations, illustrations, and examples, and no further elaboration is needed. The paper is easily understood and statements are unmistakable in what the authors are trying to say.

Accuracy: the statements and claims made are free from mistake or error; accuracy is the conformity to truth or to a standard or model.

Precision: authors use sharply defined terms and exactness in their basis for judgment.

Relevance: arguments, data, etc. all pertain to the questions and issue at hand.

Depth: a statement can be clear, accurate, precise, and relevant, but superficial. A strong article grapples with complexities in answering a question.

Breadth: the authors show sensitivity to alternative relevant points of view, lines of reasoning or perspectives.

Logic: the combination of thoughts/inferences are mutually supporting and make sense in combination. The article makes sense, reasoning follows from earlier points, and there are no contradictions in claims.

Significance: the purpose of the paper matters and is important (e.g., to theory, to methodology, to policy).

¹ Paraphrased and adapted from Richard Paul and Linda Elder's pamphlet, "The Miniature Guide to Critical Thinking: Concepts and Tools."