EA 191: Senior Thesis Manual for Environmental Analysis Students

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Contents

Introduction

Every major at Pomona College is required to have a capstone experience for matriculating students.[1] In the case of EA, two courses fulfill the capstone requirement: EA191 Thesis and EA190. In EA 191 seniors are expected to write an original research thesis in collaboration with two thesis readers.

[1] These include senior seminars, project, and theses.

Purpose of this Document

This manual has been designed to be a resource for EA seniors, EA faculty, and future EA seniors. This manual was compiled on December 4, 2017 and will be regularly revised as EA faculty continue to document best practices for the course.

Figure 1: As a scholarly activity, many find writing a thesis quite rewarding. Admittedly, the process can also be challenging. Coffee might also help. Yoga might even be better. Helping you Plan and use your time efficiently, however, is the goal of this document.

I 'meter' out sections of the manual through the semester so seniors are not overwhelmed by the sheer amount of content available on the topic and can move from step-to-step at a reasonable pace.

Learning Goals

Following the goals of Environmental Analysis, the thesis will demonstrate intellectual depth and thoughtful and sophisticated writing to meet the EA Learning Outcomes. See Appendix A – EA and Thesis Learning Outcomes for a description of EA's learning outcomes. Learning outcomes are skills and knowledge that you should be able to put on a resume/CV.

Resources

Please purchase the following text before the first day of class:

CLARK, I. **2006. Writing the successful thesis and dissertation: Entering the conversation. Prentice Hall Press**.

What is a Senior Thesis?

A senior thesis is a sustained examination of a central idea or question, developed in a professional and mature manner under the guidance of a faculty advisor (1st reader) and a second reader.

What is the Content of a Thesis?

A thesis should provide a culminating experience for your work in Environmental Analysis at the Claremont Colleges. The thesis is **not** the place to explore a discipline for the first time. However, you and your advisor can develop methods of inquiry that bridge disciplines you have already studied.

What is the Value of a Thesis?

A senior thesis is also a potential source of great satisfaction, tempered by periods of frustration, revelation, and discovery. Developing strategies to move through the ups and downs of the work will serve you well. I will be compiling some resources in Appendix I – Mindfulness for Thesis Writers.

Should your Thesis be Original?

No two theses are alike. Each is an individual reflection of an emerging scholar, researcher, critic, artist, or thinker. Thus, each is original in content, approach, and conclusion. For more information on originality see Appendix F – Originality.

FAQ: What if I don't have an original idea? A common question, but the the answer is highly individualistic. Developing a reasonable and innovative project is not an easy process. Here are some steps you might consider:

1. Review several texts that are considered central to your topic and try to identify 5 topics where the author(s) references more research is needed. This is a golden ticket. It's unlikely you'll have the capacity to address the issues.
2. Meet with your readers and see if they can suggest a reasonable question to explore.

What are your Readers Expecting?

EA faculty are proud of our thesis students and their work. To help seniors understand faculty goals, I have compiled our expectations:

- We are looking for a critical analysis.

Figure 2: Writing a thesis requires some pretty abstract thinking about assumptions and evidence.
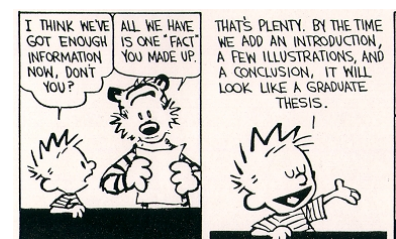
Figure 3: Balancing between a thesis that is too big or trivial is anything but easy.

- We want you to answer an analytic question or hypothesis.

- We would like you to gather evidence – from various sources – to allow you to make thoughtful interpretations and sound judgments.

- Your approach/methods should be carefully designed to come to closure.

- Your results should be clearly defined and discussed in the context of your topic and other scholarly work.

- Relevant literature should be cited. You should place your analysis in a broader context, and highlight the implications (regional, global, etc.) of your work.

- We are looking for a well-reasoned line of argument, from your initial question, compilation of relevant evidence, setting evidence in a general/universal context, and finally making a judgment based on your analysis.

- You should select a thesis readers that can provide guidance about and you should meet with them at least 5 times during the semester.

- Your thesis should be clearly written and in a format described in this document.

Selecting and Developing the Scope

Developing a Topic

Developing the topic of a thesis can be a frustrating experience – where you might spend weeks working on various ideas only to find lost time pursuing dead ends or circling around in uncertainty or both. In this section, I have outlined a structure that has worked for many students in developing their research proposals and ultimately their thesis topics. However, with each project, some strategies work better than others, so consider this a guide and not a 'directive.'

Many mental models exist to write a proposal. However, I suggest you consider Figure 5 to start your thinking and organizing your thoughts.

Defining the Problem

As an initial step, define an environmental problem that you intend to address. Ultimately, the source of this statement will be based on detailed understanding of the literature, thus modified as you learn

Figure 4: No magic exists to select a topic, nor is there a perfect topic. But we do our best.
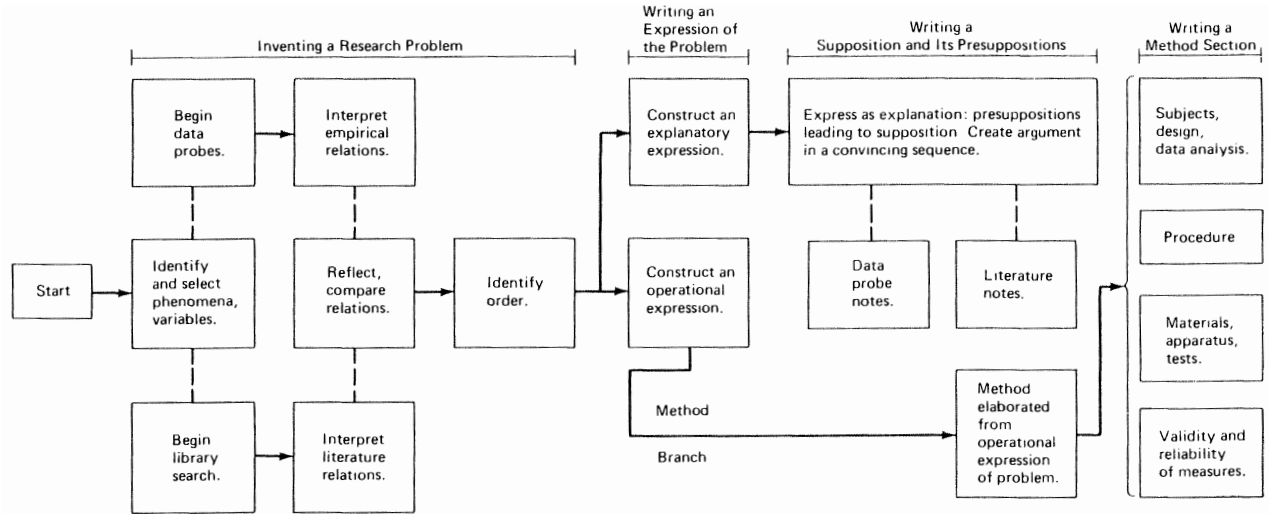
FIGURE 2.3 Flow chart of steps taken to produce a graduate research proposal (prospectus). Follow arrows from "Inventing a Research Problem" to "Writing an Expression of the Problem."

more. Nevertheless, by developing a clear and concise problem statement you will have avenues to pursue as you conduct a literature review and develop a research proposal.

Questions To Answer

The problem statement will lead directly to questions you intend to answer in your thesis. These questions, usually between 3-5 questions, can be used to 1) check to see if you are asking questions that can be answered; and 2) are unique to your project, i.e. haven't been answered before in the same way/perspective as others have.

Purpose of Project

The purpose of the project should be stated quite clearly, where you define who cares and under what circumstances they will want your questions addressed. And the "so what" will help you convince *yourself* and others to stay engaged in the research and writing process.

Using PQP: The Structure of the Thesis Proposal

Using the structure: Problem, Questions, Purpose will be used for the development of your Research Proposal. See Thesis Proposal section for a description of this process.

Figure 5: One model used to visualize the steps to write a research proposal (Source: Van Wagenen (1991). Although this is rather abstract, take some time to appreciate some of the processes that might occur as you develop a thesis topic. Can you translate these to your disciplinary training and interests? How does this model change for interdisciplinary projects?

Thesis Reader

The faculty readers: How do I choose them and what are their roles? In general it is best to work with a professor who is familiar with your work and ability, but successful theses have been written under the direction of an advisor who has never taught the student. You will meet regularly with the advisor, producing drafts and revisions under her or his guidance. In addition to the primary reader (who must be a member of the EA faculty), you will need to secure a second reader. You can read more about the roles and responsibility of the readers in Section .

For more information on this topic, read the section called "Student-Thesis Advisor Roles and Agreement Form" to develop a researcher-advisor agreement.

"When writing your essays, I encourage you to think for yourselves while you express what I'd most agree with."

Figure 6: Selecting an advisor does require to agree on the conclusions, but ensure your methods are appropriate, evidence is evaluated to generate logical and we'll argued conclusions.

Course Schedule & Milestones

The tentative schedule in Table 1 has been designed to provide structure to the class and allow thesis researchers, readers, and instructors to plan their semester. Although we may make minor adjustments, please consider these deadlines as you plan your semester.
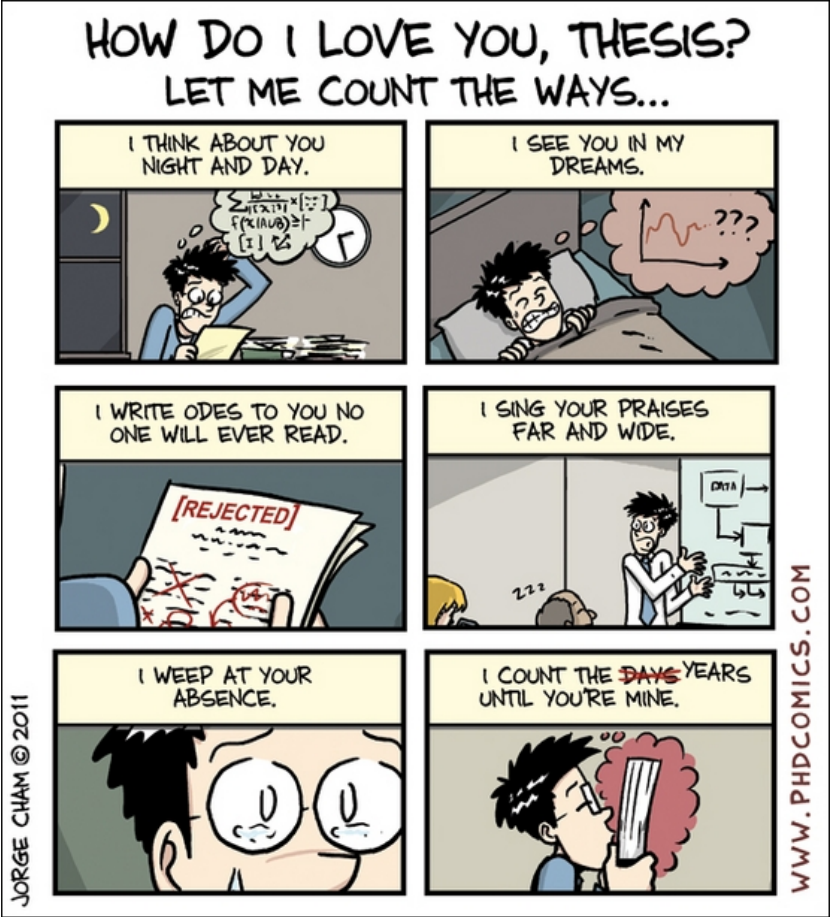
Figure 7: One challenge is to maintain control of the thesis and not let it take over.

Table 1: Course Schedule 2017. *Bring copies to class for writing workshops, **Reserved for 1st and 2nd reader meetings.

Date	Readings & Activities	Deliverable
Aug 29	Syllabus, Review EA Theses & Zotero Introduction (Bring Laptops)	
Aug 31	Evaluating Sources & Discuss Previous Theses (Library)	Thesis Reviews
Sep 5	Clark (2006, Chap. 1-2)	Précis #1* & #2*
Sep 7	Clark (2006, Chap. 3) & Peer Review Exercise	Pre-Proposal w/Annotated Bibliography
Sep 12	Clark (2006, Chap. 4)	Précis #3* & #4*
Sep 14	Clark (2006, Chap. 5) & Peer Review Exercise	Advisor Agreement Form
Sep 19	Clark (2006, Chap. 6)	Proposal
Sep 21	Clark (2006, Chap. 7) & workshopping	
Sep 26**	Advisor Meetings	
Sep 28**	Advisor Meetings	Literature Review
Oct 3	Clark (2006, Chap. 8)	Peer Review –Literature Review
Oct 5	Clark (2006, Chap. 9)	
Oct 10	Clark (2006, Chap. 10)	Revised Literature Review
Oct 12	Workshop Literature Review	
Oct 17	Fall Break	
Oct 19	Advanced Information Literacy Mtg (Library)	
Oct 24	Group #1 Workshopping	
Oct 26	Group #2 Workshopping	
Oct 31	Group #3 Workshopping	
Nov 2	Group #4 Workshopping	
Nov 7**	Advisor Meetings	
Nov 9**	Advisor Meetings	
Nov 14**	Advisor Meetings	Thesis Abstract
Nov 16	No Class	Thesis Submission
Nov 21**	Advisor Meetings	Thesis Submission – Peer Review
Nov 23	Thanksgiving	
Nov 28	Practice Presentations	
Nov 30	Practice Presentations	
Nov 31/Dec 1		Public Presentations
Dec 5	No Class	Final Submission
Dec 7	No Class	
Dec 12	No Class	

Grading

What Criteria are Used for Grading?

Each assignment will be evaluated using various 'metrics' or rubrics that build into the criteria used to evaluate the overall thesis. Rubrics are described in Appendix A through Appendix F.

Course Point Allocation

For each deliverable, grading criteria have been defined for each assignment as outlined in Table 2.

Deliverable	Percent
Cohort Thesis Review	2%
Pre-Proposal & Annotated Bibliography	4%
Précis (4 submissions)	4%
Literature Review	5%
Peer – Literature Review	4%
Proposal	5%
1st Submission	5%
Peer Review – 1st Submission	5%
Final Submission	40%
Thesis Presentation	10%
Meeting Deadlines	10%
Attendance & Participation	5%

Table 2: Grading for Course Deliverables. Please note that writing a thesis is a process, thus various stages of the process are graded, so 1) you know where you stand in the course well before the final presentations, and 2) you can gauge how much effort to invest into each project.

Meeting Deadlines

This class relies on professionalism associated with meeting deadlines because others are coordinating with your thesis project, including your classmates, instructor, thesis readers, and members of the community. Thus, meeting deadlines and class attendance become extremely important. For each missed deadline, you will be penalized by 2% of the class grade up to to 10% of the class grade.[2]

[2] Meeting deadlines is part of professionalism, aspect the world beyond that is poorly acknowledged.

Attendance & Participation

Writing a thesis is a social activity. Thus, as a class, you will be expected to participate in the social activity as demonstrated by your attendance and participation. For each missed class meeting you will penalized 1% of the class grade upto a total of 5%. If you have extenuating circumstances, I expect to be notified 24 hours before the class meeting and documentation to excuse absences.

Reading Previous Cohort Theses

For our first assignment, we will review previous cohort theses. Please select two theses to review and two others to skim.

1. `http://scholarship.claremont.edu/` (link filed under Claremont Scholarship on the library homepage)

2. On this page scroll down slightly, in the middle of the page, to the "Browse Research and Scholarship" section

3. Click on Theses and Dissertations

4. Click on Pomona Senior Theses

Complete a close read of two theses from Table 3 and submit a review the form (Thesis Review Form[3]) via `Sakai` by Aug 31.

[3] Modified from Clark (2006)

Table 3: Suggested EA Theses to Review.

Title	Author
Title	Author
A Comparison of Indigenous and Western Land Management; Case Studies of Ngāti Whātua Ōrākei and the East Bay Regional Park District	Kyle Jensen
More Than Just a Glass Face: What Makes a "Green" or "Sustainable" Building Exactly?	Kelli Kokame
Climate Change Adaptation for Southern California Groundwater Managers: A Case Study of the Six Basins Aquifer	Frank Lyles
Social Sustainability: The Role of Ecotourism in Regenerating Cultural and Environmental Histories in Rio de Janeiro	Nia McAllister
Using Geospatial Analysis for High School Environmental Science Education: A Case Study of the Jane Goodall Institute's Community-Centered Conservation Approach	Madison G. Vorva
E-Waste Recycling: The Dirty Trade Between the United States and China	Laura Edwards
Food Rebellion: Contemporary Food Movements as a Reflection of Our Agrarian Past	James Gordon
The Power of the Tower: Contesting History at Bear Lodge/Devils Tower National Monument	Anna Marie Kramer
Ballot-Box Environmentalism across the Golden State: How Geography Influences California Voters' Demand for Environmental Public Goods	William Skyler Lewis
How Can We Have A Better Public Transportation System?—An Exploratory Agent Based Model	Boyu Liu

Table 3 – *Continued from previous page*

Title	Author
Water Markets and Climate Change Adaptation: Assessing the Water Trading Experiences of Chili, Australia, and the U.S. with Respect to Climate Pressures on Water Resources	Johanna M. Rayl
Listening to the Quiet Revolution: The Implications of Voluntary Simplicity for a Sustainable Society	Katherine M. Barton
Discovery Islands, Earth Islands: The Theory and Practice of Island Imagery in Environmental Thought	Naomi A. Bosch
A Tale of Two Cities: A Study of Oil's Influence on Houston	Nikki Lynn Chang
The Eco-Sustainable Initiative: A Case Study in and Evaluation of Eco-labeling	Chiara Dorigo
The San Antonio Wash: Addressing the Gap Between Claremont and Upland	Benjamin C. Hackenberger
Reforestation, Renewal, and the Cost of Coal: Opposing a Manichean Worldview in Central Appalachia	Elizabeth R. Hansen
Ensuring Our Future or Sowing the Seeds of Our Own Destruction? Crop Insurance and Water Use in Texas	Michael Shapiro
Bridging the Blue-Green Divide: The Role of Environmental NGOs in Tackling Environmental Problems in Taiwan	Yttrium Sua
Looking Beyond Fossil Fuel Divestment: Combating Climate Change in Higher Education	Robin Xu
Energy Storage in the Golden State: An Analysis of the Regulatory and Economic Landscape.	Ryan H. Higgins
Spreading The Char: The Importance of Local Compatibility in the Diffusion of Biochar Systems to the Smallholder Agriculture Community Context	Laura C. V. Munoz
Biodynamic Agriculture: A Valuable Alternative to the Industrial Farming System	Eden K. Olsen
Fish and Fruit for Food Justice Success	Nickelle A. Raschick
Farming: It's Not Just for Farmers Anymore	Jennifer Schmidt
Wetlands and Greenhouse Gas Fluxes: Causes and Effects of Climate Change—A Meta-Analysis	Robert E. Ventura
Images for a Nation: The Role of Conservation Photography in American Environmentalism	Nathaniel W. Yale
Reconsidering Firmitas: Durability as an Integral Function of the Sustainably Built Environment	Katherine P. Yzurdiaga

Thesis Review Form

Reviewer: . . . .
        First name   Last name

Reviewed Thesis: . . . .
        First name   Last name

Categorize the type of thesis written:

 Environmmental Science

 Humans and Environment

 Sustainability and Built Environment

 Defies Categorization

- What is the purpose of the thesis? Where is the purpose stated?

- Examine the introductory material or first chapter. How much information is included in the first section?

- Examine the thesis as a whole. How many chapters does it have? How is the content divided?

- Describe the theoretical framework or methodological approach used to evaluate evidence in the thesis.

- Describe how sources of evidence were used? Were the sources compelling?

- Describe how citations used in the thesis. How was a literature review used?

Pre-Proposal and Annotated Bibliography

Introduction

Writing a thesis in EA is not only a culminating experience, it provides an opportunity for you to explore a particular theme of interest using the academic skills you have obtained as part of your college career. To ensure success, I have developed the following worksheet to help you prepare for the course. Writing a thesis is a demanding task. I will structure the course to help you manage your time and improve your success. As part of that, we'll need to articulate some expectations.

Consider what the topic is in a broad sense and describe the approach you intend to take. Next, find two or three citations that you consider as models to emulate. Finally, articulate a "maximal statement." The maximal statement might might be the big question that you want to *and think you **can** answer* – This should be short and direct. Please avoid "problematizing it", just let it stand knowing that it might have severe limitations.

Please complete this Pre-proposal form to the best of your ability. I use the form in two ways. First, in the spring, the form is used to encourage students to starting writing about their thesis and one completed to grant requested PERMs to enroll in the class. Second, in the first weeks of EA191, I ask students to fill out the form again to document how much work was completed in the summer and gauge how much of the project as changed (developed). Finally, with an annotated bibliography, this stage provides an avenue to record progress in reading scholarly literature.

"Maximal Statement"

Students should write down strongest reasonable statement on what they think they will find about their chosen topic. We refer to this as the "Maximal Statement." For instance, if you are writing about climate adaptation and groundwater planning a short version of their statement might be:

> Groundwater resources will be strongly affected by climate change. Infrastructure including dams, spreading grounds, and pumping will need to be rebuilt and have their operating procedures changed in order to meet water supply needs. Current groundwater planning does not plan for climate change well and is not considering the infrastructure changes that will be needed.

Or, from another past thesis on water quality regulation and communities.

Water quality regulation does not result in improving the community's access and use of waterbodies. This means that it does not develop the political support needed to support regulation in the future.

These statements are all hypotheses, which should be developed into questions.

In the first example, some questions would be:

Are groundwater resources will be strongly affected by climate change?

Does current groundwater planning consider climate change?

However, just having the questions is not enough. We should aim to prove or disprove these hypotheses, so at the end of the thesis you can say whether the weight of the evidence is with or against the hypotheses.
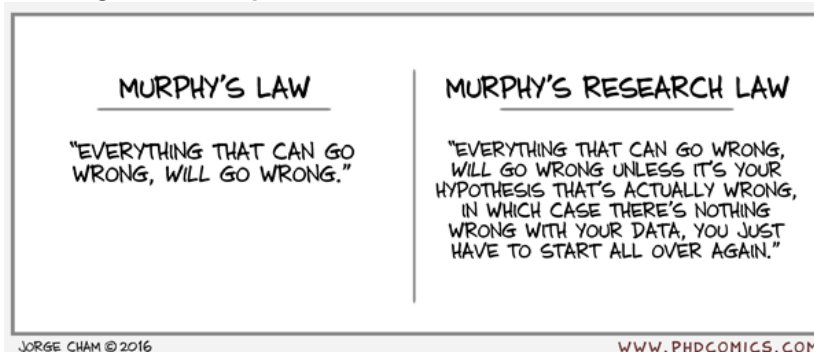
Figure 8: Whether or not our hypotheses are correct, we will learn a lot!

Grading

Criteria	Example Questions	Percent
Completeness	Has the entire form been filed out?	30
Timeliness	Has the form been submitted in a timely fashion?	20
Demonstrated Effort	Is the text well developed and are the listed citations appropriate? And has the student developed a good annotated bibliography	50

Table 4: Grading Criteria for the Pre-proposal and Annotated Bibliography

Pre-Proposal Form

Please use Adobe Reader to fill out and save this form and submit via `Sakai` by Sep 7.

....

First name   Last name   College

Please select the EA Track you identify with:

SBE (Sustainability & Built Environment)

Race, Class, and Gender

Environmental Science

Other (please describe)

Time Invested   As of today's date (December 4, 2017), please estimate how many hours of research you have already completed for your thesis:

Activity	Time (hours)
Reading background material	
Proposal writing	
Collecting data/curating resources	
Data or content analysis	

Proposed Thesis Topic

• Describe your thesis topic of interest (between 200-300 words):

• Describe the theoretical framework and/or empirical evidence you will use to explore the topic:

• List 2-3 scholarly works that you consider models to emulate:

- Write a "maximal statement" (between 40-60 words):

Thesis Reader(s):   List the EA faculty that you intend to have as thesis readers. Be sure to check the box if you have contacted the reader already.

	Faculty Name	Department	Contacted
1st Reader	....	....	
2nd Reader	....	....	
Alternate	....	....	

Annotated Bibliography   Please include as a separate document an annotated bibliography of the most salient books/articles you intend to use for the thesis. The number of references can vary widely depending on your discipline, but this assignment I suggest: 2-3 review articles and 5-8 peer reviewed articles.

Student-Thesis Advisor Roles and Agreement Form

For the Thesis Writer

This section is designed to facilitate a conversation between the thesis student and thesis advisors/readers. With the pre-proposal in hand, the Agreement Form below encourages student researcher and readers to develop clear, transparent expectations with respect to deliverables and comments.

Discuss and revise the pre-proposal with your thesis supervisor / first reader so the proposal has an improved scope and focus for your research. To be prepared, consider the following questions:

1. Clarify goals o Define the problem(s)

2. Clarify the trends

    • History, background

    • Present state of things

    • Overview of what has already been suggested

    • Identifies a set of potential policy approaches

3. Clarify the conditioning factors

    • Broader picture — what are the dynamics? Causal relationships?

    • Pull in literature here

    • Ex. How the sharing economy leads to XX outcomes? What things will shape the sharing economy?

4. Project consequences of policies I come up with

5. From the above policies, identify the best alternative — decide on balance which is preferable

Work out a written schedule with your advisor for various checkpoints keeping Table 5 in mind. For each step two dates have been defined: a date by which you will complete each deliverable, and a date by which your advisor will return your work with feedback. Students will submit work products to the EA instructor and thesis advisor(s) as specified in Table 1.

Follow the schedule as closely as possible, and make explicit, mutually agreeable revisions to deadlines only as needed. Avoid drift.

For the Thesis Advisor (First Reader)

Students are required to attend EA191 class meetings, where we discuss how to construct thesis statements; develop compelling research questions; collect and analyze evidence; and make sound conclusions. Students have written a pre-proposal to enroll in the course. At the commencement of the semester, students develop a literature review and a formal research proposal, which will be submitted to the thesis advisor. In addition, student and faculty will use this form to articulate when various milestones will be met. Please consider adding or changing the milestones or shortening deadlines depending on the project in question.

The thesis advisor (first reader) is the student's primary source of feedback for the thesis project. Starting in 2017, we are trying to

structure an explicit agreement and regular meetings to cover the following points:

- The topic and the limits of the research, as worked out in a proposal;
- the times for regular meetings or communications;
- timeline for completing the research proposal, literature review, drafts, revisions; and
- advice on choosing a second reader for the thesis.

Beyond these guidelines, the thesis student and 1st reader may negotiate additional milestones that help the advisor to note looming problems with the research.

Figure 9: An eternal struggle — Yes, but hopefully with enough structure, we can avoid some of the pitfalls in the process.

For the Second Reader

Second readers often offer general advice on content rather than detailed editorial comments on style. Consequently, you may want to see an early draft rather than waiting to judge the final draft, but that has not been explicitly defined in the agreement template. The second reader should not feel obligated to approve a thesis that seems inadequate, even in the eleventh hour. Last minute dilemmas can be avoided only by early intervention.

You may want to meet with the student and thesis supervisor to discuss your role as soon as you agree to be the second reader. Students are encouraged to meet regularly with their primary adviser, but at less frequent intervals with their second readers. Make a schedule with the student to help facilitate the feedback process. If you have any questions, please contact the EA191 instructor.

Schedule of Deliverables

Using the table below, confirm the schedule of deliverables between the student research and their 1st reader and 2nd reader.

Table 5: Deliverable milestones for student and thesis readers. *Additional milestones based on advisor requirements.

Deliverable	Submitted to 1st Reader	Submitted to 2nd Reader	Returned to Thesis Student w/Comments
Advisor Agreement Form	Sep 14	Sep 14	Sep 14
Thesis Proposal	Sep 19	Sep 19	Sep 26
Revised Literature Review	Oct 10	–	Oct 5
1st Submission	Nov 16	–	Nov 15
Public Presentation	Nov 31/Dec 1	Nov 31/Dec 1	–
Final Submission	Dec 5	Dec 5	–
Additional Milestones*			

Signatures

We agree to our roles and the milestones in Table 5. In addition, if anything goes astray, we will contact the EA191 instructor.

Researcher Signature . . . . _____

Print Name . . . . _____

1st Reader Signature . . . . _____

Print Name . . . . _____

2nd Reader Signature . . . . _____

Print Name . . . . _____

Précis

Introduction

To develop a deep understanding of the literature, students will be reading peer-reviewed journal articles. For this assignment you will practice writing concise expositions based on a succinct analysis of a peer-reviewed, scholarly journal article. Note: Think of the as a critical analysis of the reading, not a summary.
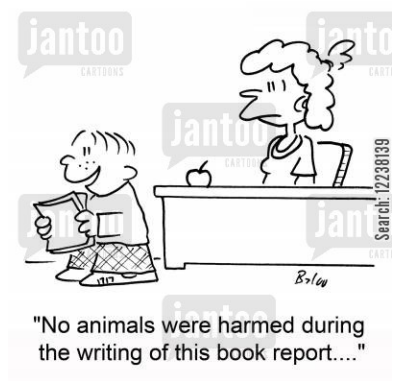
Rationale

Learning how to read a peer-reviewed journal article takes time and practice. The language is precise and difficult to access until you have become an expert in the field. However, by using this guide, you will have some steps to make the process easier. In particular, by writing a critical analysis of the readings, you will begin to appreciate what is present and what is missing in various scholarly writings. By finding areas that are problematic or missing, you can use this to define space for your thesis.

Assignment

As a final product, you will write write one page précis which provides a compelling thesis about the reading(s). A précis not a summary of the article, but an analysis of the article, evaluation of its value, and argument for or with the reading. After writing the précis, have it reviewed by a peer or writing fellow and submit both the draft and revised précis on Sep 5 for précis #1 and #2 and Sep 12 for précis #3 and #4. Thus, you will submit 4 drafts and 4 different pr/'ecis.

Guidelines

Read a peer-reviewed journal article that provides the background and content for your literature review and thesis. After carefully (i.e. actively) reading the article, summarize the central theme and scope of an article or articles in one or two sentences. Describe the methodological approach; compare and contrast the article with a textbooks or other readings; and describe how the information informs your understanding of the topic; and determine the value and significance of the work as a contribution to the subject under consideration.[4] Clark (2006, page 25) might be used as a prompt if you are having trouble getting started. Clark (2006, page 26-29) might help you structure your précis, as well.

"No animals were harmed during the writing of this book report...."

[4] There are several ways to evaluate the value of an article or articles. First, you can analyze the number of times the article had been cited by others. This approach is a bit superficial. Methodological papers and foundational papers, i.e. examples that used in textbooks, tend to get cited a great deal. A more sophisticated approach analyzes the paper in the context of the field.

Finally, your précis must have a thesis statement. This thesis statement should capture your position and that others could reasonably dispute and is used to structure your preécis because it's purpose is to support this claim. It should be provocative. In other words, the thesis statement is the claim you will make about the reading — not the claim in the reading. A thesis is an interpretation of a question or subject, not the subject itself.

Piled Higher and Deeper *by Jorge Cham*   **www.phdcomics.com**
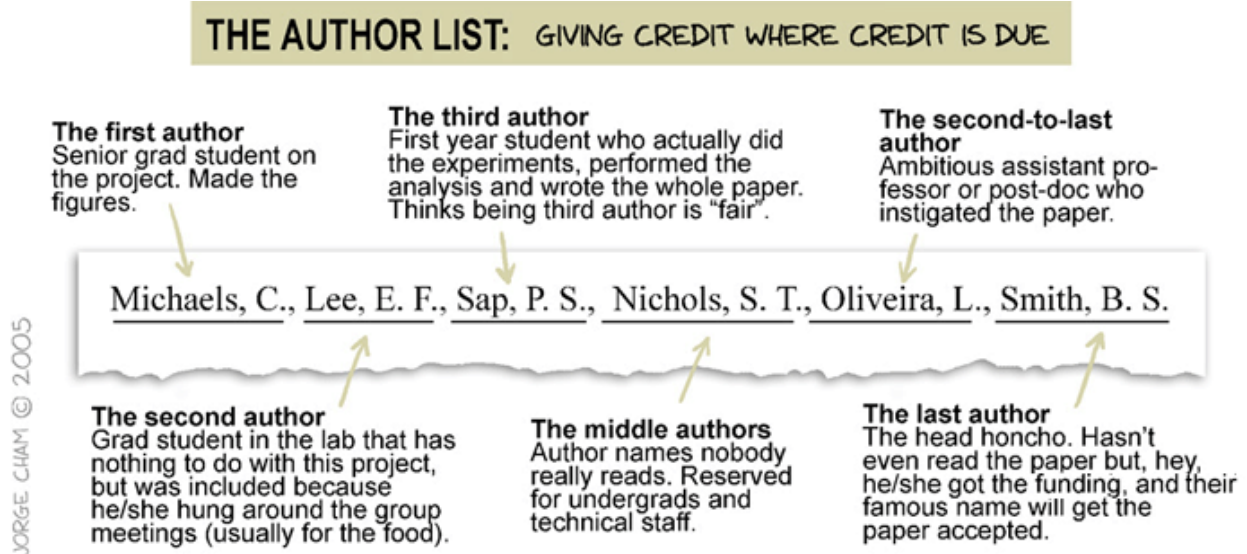
Figure 10: Deciphering the contribution of individual authors is not always straightforward. Note: Although there are some cynical examples, most authorship order is based on a reasonable division of labor.

Steps to Successful Précis

1. Complete reading using active reading strategies

2. Develop a thesis statement

3. Outline evidence to support thesis

4. Write draft précis

5. Obtain peer evaluation

6. Revise final version

Précis Submission

Submit your a draft and revised précis for each assignment via `Sakai` as a pdf. The draft must reviewed and signed by a writing fellow or peer after they have given suggestions.

Précis Grading

For each of the four précis, grading is based on Table 6.

Table 6: Précis Grading Criteria

Criteria	Questions to Consider	Points
Thesis	Does the thesis grab the reader's interest in the opening sentence? Is the scope is highly focused? Is the definitive, clear thesis statement with defined terms? Is the thesis arguable with carefully framed counter arguments?	5
Evidence	Does evidence support the thesis? Is the evidence factually accurate? Is the evidence presented in a readable, understandable, and logical manner?	5
Critical Thinking	Are there consistently critical, relevant, connections among arguments, topics, subtopics? Are there insightful, original and appropriate conclusions beyond a summary of evidence?	5
Effective Writing	Are sentences concise, strong, and expressive with varied structure? Is the writing is smooth, skillful, coherent? Is the use of passive voice or construction limited? Has specific and concrete diction been both steady and consistent throughout the piece demonstrating an educated and mature tone?	5
Writing Conventions	Does the punctuation, spelling, capitalization support sophisticated sentence structure without errors? Are independent clauses correctly punctuated (No sentence boundary errors) that support main points? Do sentences effectively develop a focused and complete thought? Do paragraphs have coherent arguments that all support a topic sentence without distracting points	5
Supplemental Activity	Have knowledge gaps been identified? Have methods or theoretical models been identified and contextualized Have counter-arguments been raised? Has the revised précis demonstrated improvement? Has the précis been submitted in the correct format?	5

Literature Review

Rational

Literature reviews provide you with a handy guide to a particular topic and will help you frame the methods and results of your thesis work. If you have limited time to conduct research, literature reviews can give you an overview or act as a stepping stone. For scholars, the depth and breadth of the literature review emphasizes the credibility of the writer in his or her field. Literature reviews also provide a solid background for a research paper's investigation. Comprehensive knowledge of the literature of the field is essential to a successful thesis.

EA seniors are faced with the daunting task of writing a thesis that relies on disciplinary expertise, the intellectual foundation that that the thesis will be

Assignment

Write a literature review, double-spaced, 12 point font and less then 10 pages. Use a generic format: begin general and finish with a very specific narrowly defined knowledge gap that justifies your thesis proposal. Be sure to cite properly, using the CSE guidelines provided.

What is a Literature Review?

A literature review discusses published information in a particular subject area, and sometimes information in a particular subject area within a certain time period. A literature review refers to any collection of materials on a topic, not necessarily the great literary texts of the world. "Literature" could be anything from a set of government reports on endangered species or the risks associated exposure to hazardous chemicals to scholarly articles on stream restoration.

A literature review is not a simple summary of the sources, but it usually has an organizational pattern and combines both summary and synthesis. A review is not a recap of the important information of the source, but a synthesis of that information. It might give a new interpretation of old material or combine new with old interpretations. Or it might trace the intellectual progression of the field, including major debates. A literature review will evaluate the sources, advise the reader on the most pertinent or relevant, and even defines criteria to judge the sources.

How is a Literature Review Different from the Thesis?

The main focus of a research thesis is to develop a new argument, and a research paper is likely to contain a literature review as one of its parts. In your thesis, you will use the literature as a foundation and as support for a new insight that you contribute. The focus of a literature review, however, is to summarize and synthesize the arguments and ideas of others without adding new contributions. A literature review is also a persuasive argument – to convince the reader of a particular viewpoint, interpretation of the literature. In this way, the literature review is the perfect avenue to justify the research completed for your thesis.

FAQ

Roughly how many sources should you include? The usual quip is "as many as it takes, " which is a less than satisfying answer. In my experience, there will be about 5-7 references per page of text and in a 10 page paper, I would generally expect to see 30-40 citations and a thesis might have over 80 citations.[5]

What types of sources (books, journal articles, websites)? It depends on the discipline. Although you can use a range of sources, I suggest you rely on peer-reviewed journal articles and reputable authors for books. Please consult your thesis advisor for more details.

Should you summarize, synthesize, or critique your sources? As I discuss below, your literature review is an argument – use as many rhetorical tools as needed to accomplish this goal.

Should you evaluate your sources? Cross checking the validity of a reference or source is one of the key jobs of a scholar. At first, this will be a daunting task, but with time, you will get better and better at this. I suggest you spend time intentionally looking for "counter-arguments" that are either implied within your source or search for contradictory interpretations. Obviously, learning what is contradictory means you need to understand both the arguments and counter-arguments. Thus, this is an advanced skill, usually reserved for graduate school students. But, it's a good time to try your hand at this and use your advisor and EA instructure as a resource to practice.

Should I get my peers to read my literature review? Yes. You can do this by having many people review and give you feedback. The more sophisticated your reader, the better you can get an honest evaluation of your work and then you can learn to self-assess.

[5] The number of citations varies by the project, so you should calibrate yourself to what is appropriate for your thesis and disciplinary traditions. Please do not the number paralyze you. For example, start writing as soon as you feel like you have a handle. Sometimes the writing process will help you focus on what resources you still need.

"It doesn't matter that your thesis is on extra sensory perception, you can't cite mindreading in your references."

Figure 11: Developing practices to ensure you can document your evidence and conversations you have with scholars in the field is a key aspect of your literature review.

Should you provide subheadings and other background information, such as definitions and/or a history?
   Absolutely – you want to help the reader as much as possible.

Hints at Getting Started

- Seek out and read other literature reviews in your area of interest or in the discipline to appreciate the range of themes possible and how authors organize their reviews. and read them to get a sense of the types of themes you might want to look for in your own research or ways to organize your final review. You can simply put the word "review" in your search engine along with key words find review articles. Our library can give us more sophisticated search strategies.

   articles of this type on the Internet or in an electronic database. The bibliography or reference section of sources you've already read are also excellent entry points into your own research.

- Narrow your topic. There are hundreds or even thousands of articles and books on most areas of study. The narrower your topic, the easier it will be to limit the number of sources to read to have a good survey of the material. Your advisor will probably not expect you to read everything that's out there on the topic, but you'll make your job easier if you first limit your scope.

- And don't forget to tap into your professor's (or other professors') knowledge in the field. Ask your professor questions such as: "If you had to read only one book from the 90s on topic X, what would it be?" Questions such as this help you to find and determine quickly seminal pieces in the field.

- Consider whether your sources are current. Some disciplines require that you use information that is as current as possible. In the sciences, for instance, treatments for medical problems are constantly changing according to the latest studies. Information even two years old could be obsolete. However, if you are writing a review in the humanities, history, or social sciences, a survey of the history of the literature may be what is needed, because what is important is how perspectives have changed through the years or within a certain time period. Try sorting through some other current bibliographies or literature reviews in the field to get a sense of what your discipline expects. You can also use this method to consider what is currently of interest to scholars in this field and what is not.

Strategies for Writing a Literature Review

Find a focus   A literature review, like a term paper, is usually organized around ideas, not the sources themselves as an annotated bibliography would be organized. This means that you will not just simply list your sources and go into detail about each one of them, one at a time. No. As you read widely but selectively in your topic area, consider instead what themes or issues connect your sources together. Do they present one or different solutions? Is there an aspect of the field that is missing? How well do they present the material and do they portray it according to an appropriate theory? Do they reveal a trend in the field? A raging debate? Pick one of these themes to focus the organization of your review.

Convey it to your reader   A literature review may not have a traditional thesis statement (one that makes an argument), but you do need to tell readers about that argument. Try writing a simple statement that lets the reader know what is your main argument. Here are a couple of examples:

- The "Decolonization Movement" has been used to re-frame the curriculum that ecologists must incorporate in their pedagogy to produce a more objective science.

- Cultural studies scholars effectively use popular media to analyze alternative sustainable development models.

Consider organization   You've got a focus, and you've stated it clearly and directly. Now what is the most effective way of presenting the information? What are the most important topics, subtopics, etc., that your review needs to include? And in what order should you present them? Develop an organization for your review at both a global and local level:

First, cover the basic categories. Just like most academic papers, literature reviews also must contain at least three basic elements: an introduction or background information section; the body of the review containing the discussion of sources; and, finally, a conclusion and/or recommendations section to end the paper.

1. Introduction: Gives a quick idea of the topic of the literature review, such as the central argument, i.e. thesis, and organizational pattern.

2. Body: Contains your discussion of sources and is organized either chronologically, thematically, or methodologically (see below for more information on each).

3. Conclusions/Recommendations: Discuss what you have drawn from reviewing literature so far. And provide a bridge to justify the topic of your thesis research. For example, where might the discussion proceed?

Organizing the body   Once you have the basic categories in place, then you must consider how you will present the sources themselves within the body of your paper. Create an organizational method to focus this section even further.

Chronological

By publication

By trend

Thematic

Methodological Once you've decided on the organizational method for the body of the review, the sections you need to include in the paper should be easy to figure out. They should arise out of your organizational strategy. In other words, a chronological review would have subsections for each vital time period. A thematic review would have subtopics based upon factors that relate to the theme or issue.

Additional Sections   Sometimes, though, you might need to add additional sections that are necessary for your study, but do not fit in the organizational strategy of the body. What other sections you include in the body is up to you. Put in only what is necessary. Here are a few other sections you might want to consider:

• Current Situation: Information necessary to understand the topic or focus of the literature review.

• History: The chronological progression of the field, the literature, or an idea that is necessary to understand the literature review, if the body of the literature review is not already a chronology.

• Methods and/or Standards: The criteria you used to select the sources in your literature review or the way in which you present your information. For instance, you might explain that your review includes only peer-reviewed articles and journals.

The Conclusion of the Literature Review

A literature review for a thesis must include "Questions for Further Research." In other words, you should justify your research by developing the answers to "what questions about the field has the review

sparked?" and "How will you further your research as a result of the review?"

The Writing Process

Once you've settled on a general pattern of organization, you're ready to write each section. There are a few guidelines you should follow during the writing stage as well.

Be selective Select only the most important points in each source to highlight in the review. The type of information you choose to mention should relate directly to the review's focus, whether it is thematic, methodological, or chronological.

Use quotes sparingly Few authors rely on many direct quotes. That is because the survey nature of the literature review does not allow for in-depth discussion or detailed quotes from the text. Some short quotes here and there are okay, though, if you want to emphasize a point, or if what the author said just cannot be rewritten in your own words. If you find yourself wanting to put in more quotes, check with your thesis advisor to get his/her opinion.

Summarize and synthesize Remember to summarize and synthesize your sources within each paragraph as well as throughout the review. Authors should not just recapitulate important features of a study, but also synthesize it by rephrasing the study's significance and relating it to other works.

Keep your own voice While the literature review presents others' ideas, your voice (the writer's) should remain front and center. Review articles weave references to other sources into their own text, but they still maintain their own voice by starting and ending the paragraph with their own ideas and their own words. Again, the sources are used as evidence for the argument being made.

Use caution when paraphrasing When paraphrasing a source that is not your own, be sure to represent the author's information or opinions accurately and in your own words. In the preceding example, authors either directly refer in the text to the author of their source, or they provide ample notation in the text when the ideas they are mentioning are not their own.

REVISE, REVISE, REVISE Draft in hand? Now you're ready to revise. Spending a lot of time revising is a wise idea, because your main objective is to present the material, not the argument. So check over your review again to make sure it follows what your

advisor expects. Then, just as you would for other academic forms of writing, rewrite or rework the language of your review so that you've presented your information in the most concise manner possible. Be sure to use terminology familiar to your audience; get rid of unnecessary jargon or slang. Finally, double check that you've documented your sources and formatted the review appropriately for the class.

Grading

Grading Criteria

Table 7 defines the grading criteria used of the 1st and final submission of the literature review. as noted below, the rubrics for each criterion are included in the appendices.

Criteria/Rubric	Percent
Appendix C – Critical Thinking	25
Appendix D – Information Literacy	50
Appendix E – Scholarly Writing	25

Table 7: Grading Criteria for Literature Review.

Revised Literature Review

FAQ 1: Are we constrained to the 10 page limit?

No. In many cases, you have been developing sections and chapters that will form your thesis. So, I could envision that you break your literature review into sections that parallel your thesis.Â

FAQ 2: How should I submit my revised Literature Review?

Please submit your revised Literature Review via email to your thesis readers and copy me on the email. In addition, put the review on Sakai.Â

FAQ 3: What if my topic has changed and my previous review is less relevant?

First, I am not surprised. This is part of the process. To avoid anyone feeling penalized, please consider the next deadline as "floating", so you can revise as appropriate. The syllabus has a deadline of Oct. 10th. I will accept revised versions until the 14th without penalties.Â

FAQ 4: Can I have my literature review used in the writing workshop?

Yes, please send me a note that you are interested. Then send me a revised draft that we canÂ workshop on the 12th. I have asked a few students if we can use their literature review already, so if this would be of interest, please send me a note relatively soon because we don't have time do workshop everyone's in this go around.

FAQ 5: How will the revised Literature Review be graded?

I will re-read your Literature Reviews and average the two gradesÂ from the draft version and final version.Â Â

FAQ 6: What if I haven't been able to peer review a literature review?

Some students haven't finished their literature review. I will re-assign new people to review by Sunday, 3 pm if I don't received missing literature reviews. Please be patient – the writing process is a social process and we need to embrace flexibility if we can.

References

We used the following sources for this section: Troyka (2002); Anson and Schwegler (2000); Jones et al. (1997); Lamb (2006); Rosen and Behrens (2000).

Literature Review Score Sheet

Table 8: Scoring Sheet for Literature Review

	Highly Developed (5)	Developed (4)	Emerging (3)	Initial (<3)
Attribution (IL)				
Evaluation of Sources (IL)				
Communication of Evidence (IL)				
Subtotal (weighting score/15 *. 0.5 * 4)				
Selection or Formulation of a question (CT)				
Design/Selection of Method(s) (CT)				
Interpretation (CT)				
Evaluation (CT)				
Subtotal (weighting score/20 x 0.25 * 4)				
Thesis (Writing)				
Evidence (Writing)				
Structure (Writing)				
Style (Writing)				
Mechanics (Writing)				
Supplementals (Writing)				
Subtotal (weighting score/30 x 0.25 * 4)				

Peer Review

Rational

Peer review is designed to assess the validity, quality and often the originality of articles for publication. Its ultimate purpose is to maintain the integrity of scholarship by filtering out invalid or poor quality products. In our context, peer review will also be used to improve our attempts to communicated accurately and clearly.

Assignment

Evaluate 2[6] selected submissions (Literature Review and 1st Thesis submission) using the peer review form (page 39).

[6] I wonder if three or more would be more useful, but I don't think we have time!

Modeling The Review Process– In Class Activities

Though we would like peer review sessions to proceed vibrantly for an entire class with students giving one another thorough and incisive feedback on one another's drafts, experience shows that peer review feedback typically fails to meet these goals. Students often provide comments that are too broad and un-actionable. Below are some exercises to keep us focus on critiquing specific elements of each other's work after prepared feedback has been given.

Peer Review Exercise 1 – identify and correct a "Sentence Primed for Improvement".[7]

[7] This exercise typically takes a three member peer group 18-22 minutes to complete.

   Step 1 Students create two examples of from the list of "Primed Sentences". These include (but aren't limited to):

   - abstract subject (so the reader can't grasp the meaning)
   - passive voice or weak verbs
   - lack of clarity,
   - wordiness, lack of conciseness,
   - official style (high diction, ponderous nouns, weak verbs, strings of prepositions)
   - sentence compression
   - inanity, superficiality
   - grammatical and punctuation mistakes

   Step 2 With a partner, locate a "Primed Sentence" in each one of your drafts. Together, revise the sentences into good, clean, clear, meaningful sentences.

Peer Review Exercise 2 – Banishing Vagueness from the Thesis Statement(s)

Early drafts of a thesis statements are typically plagued by vague phrasings that fail to give the text the direction they need from the outset. Quite often, the replacement of these vague terms with specific ones transforms these weak thesis statements into potentially illuminating ones.[8]

Step 1 With your partner's précis, find the thesis statement(s);

Step 2 Circle all of the vague words and phrases;

Step 2 Use what you remember from the body of the paper to replace those vague terms with more specific ones;

Peer Review Exercise 3 – Identifying Motivating Moves

An effective argument will not simply demonstrate that its main claim is true; it will also show why that claim is meaningful or important. Motive is the moment that occurs early in your essay where you show your audience not what you will argue, but what is at stake in that argument. More specifically, motive statements highlight a problem, confusion, tension, or gap in our existing understanding. Put differently, writers motivate their arguments by suggesting in their introductions how those arguments reconsider, critique, or even challenge the status quo.

The feedback we receive from our peers about their motive will often differ dramatically from what we think we are doing while composing a paper. This exercise allows us to explore the range of possibilities for motivating an essay and to receive feedback on new possibilities for our own essays.[9]

[8] Steps 1 and 2 typically take 10-12 minutes to complete.

[9] Steps 1 and 2 typically take a three member peer group 5-8 minutes to complete, though proposing new motives for essays typically takes considerably longer.

Step 1 In groups of three, circle the motive in peers' essays.

Step 2 They should then link it to a "motivating move" from Kerry Walk's Motivating Moves. In cases in which works do not have a motive, peers should propose one for their essay based on their understanding of its content.

Some Motivating Moves by Kerry Walk

1. The truth isn't what one would expect, or what it might appear to be on first reading.
2. The knowledge on the topic has heretofore been limited.
3. There's a mystery or puzzle or question here that needs answering.
4. Published views of the matter conflict.
5. We can learn about a larger phenomenon by studying this smaller one.
6. This seemingly tangential or insignificant matter is actually important or interesting.
7. There's an inconsistency, contradiction, or tension here that needs explaining.
8. The standard opinion(s) need challenging or qualifying.

Step 3 After identifying the motives, propose a different motive for the essay than the one the author has chosen.

As a class, we will discuss the following questions:

1. What were common themes between the three reviewed precis?
2. Was there surprises for which motives were selected?
3. What was the value of alternative motives?

Mindful Practice When we are done, take a few minutes to reflect on the process. One of the key aspects of our thesis is that we have compassion for ourselves as we move through the process. Success is our goal, but we might find a rather bumpy road on the way and it's important be patient and kind to ourselves. I suggest this Self-Compassion/Loving Kindness Meditation.

Peer Review Exercise 4 : Fixing Weak Topic Sentences

If a thesis statement is a road map to a paper, then a topic sentence is a guide to a paragraph. Therefore, you might view a topic sentence as kind of mini-thesis statement, organizing and enabling the development of each paragraph in a paper. The topic sentence of a paragraph should convey that paragraph's content and organization. It gives a preview of the paragraph's subject and the treatment of that main idea (your view of the subject). Therefore, use specific language in your topic sentences and avoid making broad, sweeping generalizations.

Each paragraph should have its own topic sentence and should focus on only one main idea or point, which is referred to as paragraph unity. When your writing shifts to a new idea, you need to begin a new paragraph and write a new topic sentence.

[10]

Step 1 Identify the strongest and the weakest topic sentence in each paper.

Step 2 Identify what is strong about the best topic sentence and to then revise (or rewrite) the weak topic sentence according to the model provided by the strongest one.

[10] This exercise typically takes a three member peer group 10-12 minutes to complete.

Peer Review Deliverables

Table 9: Peer Review Assignments

Deliverable	Date Received	Date Completed	Criteria	Percent
Précis #1 and #2	Sep 5	in class activity	Thesis	NA
Précis #3 and #4	Sep 12	in class activity	Evidence	NA
Literature Review	Sep 28	Oct 3	IL	4%
1st Submission	Nov 16	Nov 21	Writing	5%

Grading

Using the grading criteria for each assignment, use the Peer Review from below:

Criteria	Example Questions	Percent
Completeness	Has the entire form been filed out?	50
Timeliness	Has the form been submitted in a timely fashion?	25
Demonstrated Effort	Is the text well developed and are the listed citations appropriate?	25

Table 10: Grading Criteria for Writing

Piled Higher and Deeper *by Jorge Cham*   **www.phdcomics.com**

title: "Writing your Thesis Outline" - originally published 5/22/2006

Figure 12: No comment... :-)

Peer Review Form

Instructions: Print out a hardcopy of the work to be reviewed. After completing a short pre-read, carefully read the text to provide constructive feedback. Pay attention to areas where topic sentences are vague or could be improved. Highlight areas that remain unclear or could be misinterpreted. Search for passive voice and passive constructions (e.g. 'there are', 'there were') and propose how it might be improved. Evaluate the arguments, were they compelling? Was adequate evidence provided? Were counter arguments addressed? Finally, based on the rubric criteria for the assignment complete the following form and submit via Sakai.

Reviewer: . . . .
           First name   Last name

Reviewed: . . . .
           First name   Last name

Please check which assignment you reviewed:

Précis

Literature Review

Proposal

Thesis

- Summarize how the content of the reviewed text in 3 or 4 sentences.

- Describe one example of how the criterion/criteria was met well. Describe why this is a good example.

- Describe one example where the criterion/criteria could have been better met.

- For each category, rank this work in terms of each developmental criteria. Justify each ranking in one sentence.

- Based on the evaluation rubric criteria, what might be things the author might work on to improve the work?

Thesis Proposal

The Proposal as a Argument

The thesis proposal is designed to convince your readers that you will be able to write and complete a thesis. In other words that you have the intellectual capacity, thinking skills, training, and time to write the proposed work.

As you begin to consider your arguments, consider the following goals:

• To demonstrate competence to the reviewer and advisor;

• To build trust; and

• To ensure capacity.

Assignment

Write a 4-6 page thesis proposal that include the following sections (i.e. with these named headings)

Thesis Maxim This is one sentence, 25 words or less, that makes the main idea of your argument, i.e. what you are going to demonstrate, clear to any intelligent reader.

Problem, Question, and Purpose (PQP) Define the problem that your thesis will address; what questions you intend to answer, and the purpose of the thesis. What do you hope to accomplish by writing this? Are you hoping to fill a particular gap in the research of this topic, or to bring a special perspective? How have other scholars informed this area or parallels areas of research?

Method Is there a theoretical model you will follow? What is your evidence? Are you doing field research? How have other current scholars used these models or methods to generate new knowledge?

Audience In general, the audience for a research thesis will be professionals in your discipline. Describe two or three journals and their content to demonstrate a scholarly community interested in your topic.[11]

Implications So what? What do you hope to show that is different from what has been said before in the conversation on your topic? How do you see your project fitting into the big picture of studies in your chosen discipline? If you are writing a creative thesis, what is creative about it?

[11] This might be informed by the work you did when you searched for a article/work to emulated.

Timeline Demonstrates the thesis can be completed by providing a
list or table of objectives and deliverables and their completion
dates.

For the PQP and Methods section include a list of citations that
have been used as sources of information. Submit the proposal as a
pdf via Sakai using the following naming convention:

Proposal_F17_Surname.pdf

Grading

Criteria	Measures of Success	Percent
Completeness	Address each of the sections	10%
Context	Develops an explicit conversation with other scholars	20%
PQP	Clearly defines problem, question, and purpose	20%
Theoretical Approach and Method	Engages in sophisticated methods to be used	20%
Structure of Thesis	Provides a detailed outline of product	10%
Timeline	Realistic, Staging, and Staging	20%

Table 11: Grading

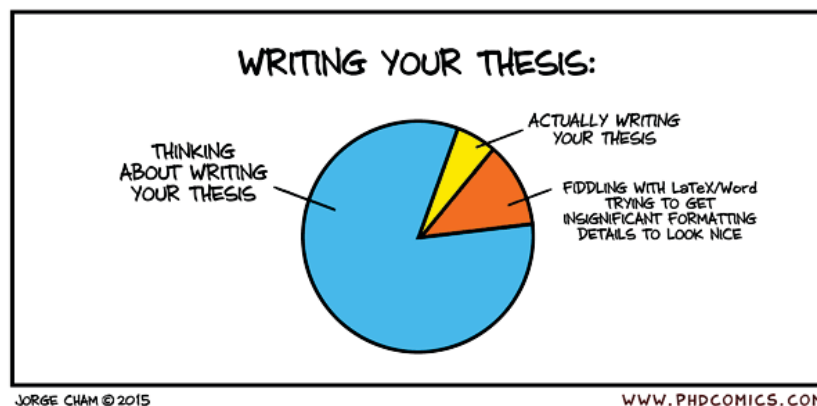

Figure 13: We can waste a surprising amount of time with things that do not add value. Can you be more efficient that others?

Final Thesis Product

Format and Structure

Length: How long should a thesis be?   The length of thesis can depend on the discipline and I hesitate to provide a number. However, in spite of this diversity, it's not uncommon to find EA theses to be well over fifty pages in length.

Font and Linespacing: What font and linespacing should I use?   I recommend Times New Roman font, but there are lots of reasons why you might choose something else. Please check with your readers. All thesis should be double spaced.

Should the thesis be bound?   It depends.

- If your college requires hardbound copies, please follow through with your registrar to confirm how that is done.

- If you readers want hardbound copies, then I suggest this would be a good gesture.

- For EA191, your thesis needs to be loaded onto the CUC Scholarship database.

Front and Back Matter: Are there special things to include before and after the thesis?   Yes, I suggest you look at previous theses to gauge what might be appropriate. First, a title page with your name and college and date. Next, you should include a table of contents – if your thesis has more than one chapter, and then your thesis. Finally, you must have your section of cited references or bibliography.

Submission Expectations

The final version of your thesis will be submitted to the library to be a permanent record. Please see the instructions at this link: `http://libguides.libraries.claremont.edu/claremontthesesdissertations/EAP` for submitting the document. Once submitted, no corrections or changes can be made. So, be sure you are ready for submission. In addition, a more general link for submissions can be found `http://libguides.libraries.claremont.edu/claremontthesesdissertations/PomonaTheses`.

Extensions are not granted by the course instructor but by your readers. If your readers agree to an extension, send an email to the EA191 instructor, copied to both of your readers with the agreed date for the final submission. With a granted extension, late submissions

will be penalized 2.5% per 24 hours. Late submissions without permission from your readers will be penalized 5% per 24 hours.

What is the Grading Process?

At the end of the semester, the the thesis (1st and 2nd) readers will complete the rubric and discuss each senior thesis with the EA 191 instructor. Thesis grades will be decided by the faculty with emphasis on the written thesis (original and revised), accuracy and sophistication of analyses, and will include weighting from the public presentation, Intro/Methods/Reference sections, effort, improvement, attendance at meetings, ability to meet deadlines, etc.

Grading Criteria

Table 12 defines the grading criteria used of the 1st and final submission of the EA thesis. Rubrics for each criterion can be found as

appendices.

Criteria	Percent	Rubric
Information Literacy	25 (15)	Appendix D – Information Literacy
Critical Thinking	25 (20)	Appendix C – Critical Thinking
Writing	30 (30)	Appendix E – Scholarly Writing
Originality	20 (10)	Appendix F – Originality

Table 12: Grading Criteria for Writing. NOTE: The sum of the scoring sheet doesn't align with these percentages yet, as demonstrated with the perenthetical values. I am still working to align these to make it more transparent.

Thesis Scoring Sheet

Table 13: Scoring Sheet for Thesis. IL = Information Literacy Rubric; CT = Critical Thinking Rubric; WRT = Writing Rubric; and ORG = Originality Rubric.

	Highly Developed (5)	Developed (4)	Emerging (3)	Initial (<3)
Attribution – Consistency & Appropriate (IL)				
Evaluation/Critique of Sources (IL)				
Communication of Cited Evidence (IL)				
Selection or Formulation of a question (CT)				
Design/selection of Method(s)/framework/theory (CT)				
Interpretation of results with scholarly literature/framework/theory (CT)				
Evaluation (e.g. Assumptions, method limitations, credibility assessment, etc.) (CT)				
Thesis Statement(s) (WRT)				
Evidence (WRT)				
Structure and Organization (WRT)				
Style (e.g. Conciseness, sentence flow, etc) (WRT)				
Mechanics and Grammar (WRT)				
Supplementals (e.g. Limitation acknowledgment and framing of results)(WRT)				
Unique Methods (ORG)				
New Application (ORG)				
Creative Solution (ORG)				

The Thesis Presentation

The public presentation is a forum to communicate your research results to the EA faculty, EA colleagues, and general peers. By learning how to communicate your ideas into a short, succinct presentation is a craft – and to help you, we will have practice sessions on the week of the presentations. I suggest you sign up for early slots to you have time to respond to comments and further refine the presentation.

Although many disciplines rely on "reading a paper", I would encourage you to develop a more conversational style with the audience and create a presentation composed of bullet points that act as prompts. Try not to read the slides! Also, try to use the slide to convey thoughts and ideas – pictures are good, but be sure to explain the pictures in your presentation – don't let them sit there without context.

FAQ

Length: How long should the thesis presentation be?   You have exactly 12 minutes, plus two minutes for questions and answers.

Presentation Software: Should I use a software package for my presentation? I recommend powerpoint or other software is fine (e.g. prezi, Google slides, etc).

How do I get the presentation online and ready on the day of my presentation?   Submit the presentation or URL to the *Sakai* site at least a few hours before we begin. Plan to arrive 30 min before the presentations begin to check that your presentation is available and working properly. I suggest you come to the room the day before and make sure the presentation works as expected.

Is there a poster session?   Currently, the faculty have preferred oral presentations. If the EA program becomes bigger, we may consider that as an option to "supplement" the oral sessions. To be clear, there is NO poster session or requirement to have posters.

What should I wear?   Professional attire is required.

What if someone in the audience asks a question that I don't know how to answer?   Begin by saying, "that is a good question." After that you can proceed in several ways. One you can ask them a question back, for example, "can you tell me why your as asking that?" or "I am not sure how to answer that, what are some ideas you have?" Or,

HAPPINESS IS

...the finish line of a race surrounded by cheers.
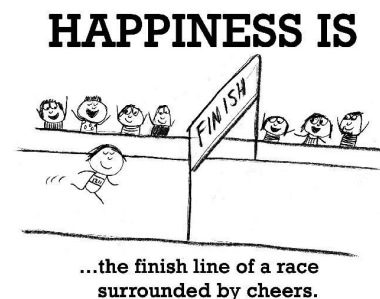
for more visit www.funhappyquotes.com

you can be completely honest and say, "I don't know, but I wonder if someone in the audience can help answer that?" I have seen the last one used with great effectiveness.

Do I have to attend all the presentations   Yes. The presentations is to promote a scholarly community which includes faculty, colleagues, and peers. How would you feel if you had to present your hard work to an empty room? Besides, I am quite sure, we will all learn something about each other and the current research trends and issues in the field – so, it's like a free "compressed" course in EA.

What should I include in the presentation?   If you are unsure how to structure your presentation, I suggest use the following structure:

1. Premise of Research (2 min) – For example, use the PQP (Problem, Question, and Purpose) structure of your proposals.

2. Methodology (2 min) – describe how you conducted your research; for those who are analyzing content it would be useful to outline a theoretical framework;

3. Pivotal Results (5 min) – limit this to 2 (maybe 3) take home messages and how you arrived at these results; and

4. Conclusion (1 min) – summarize the result as a "This is what I found and why it's important." In addition, review the question you set out to answer and tell the audience "did I answer the question" and "how did I answer the question" and "what new questions came up" and "what are the next steps in this research?"

Presentation Dates

Dates for the presentations will be provided at a later date (November 30/. Students will sign up for 14 minute slots over a two day period. I suggest that you ping your advisor to select a time that they prefer (should they decide to attend). For some advisors who have 3-4 students, I will be best to put them back to back to encourage their attendance.

Abstract Submission

An abstract that describes your thesis is a great way to briefly communicate the content of the thesis. For our purposes, the abstract will also serve as a short advertisement to promote the thesis presentation event. Keep the abstract length down to 150 words.

Submit a Microsoft Word text file of your thesis abstract and title to include in the presentation abstract volume. At the bottom of the

page, list all funding you received to support your project (e.g. Sigma Xi, department research funds, Smithsonian internship, . . .). Your file should be called something obvious (e.g. LastName_Abstract.doc). This should be submitted on Nov 14, approximately 2 weeks before the public presentations.

Presentation Submission

Please upload a presentation or link to a cloud-based presentation.

Grading Criteria

Table 12 defines the grading criteria used of the 1st and final submission of the EA thesis. Rubrics for each criterion can be found as appendices.

Criteria	Percent	Rubric
Information Literacy	25	Information Literacy
Critical Thinking	25%	Critical Thinking
Organization	20%	See below
Use of technology	10%	See below
Time Management	20%	See below

Table 14: Grading Criteria for thesis presentation.

Presentation Scoring Sheet

Table 15: Thesis Presentation Shoring Sheet

	Highly Developed (5)	Developed (4)	Emerging (3)	Initial (<3)
Communication of Evidence (IL), e.g. cited evidence, presentation of evidence				
Context (CT), e.g. PQP, evaluation of methods, assumptions, etc				
Organization (preview, summary, clarity, etc)				
Use of Technology				
Timeliness				

Organization

The presentation should have an introduction and conclusion that are both transparent and clear. The middle portion should present evidence that you have to drive home your point. I suggest that you have slides with headings that describe a question you are answering

or a provocative statement that you can define. Once you are done, please tell the audience what you have demonstrated and how you have demonstrated it. You will also want to outline what questions remain.

The presentation should be well rehearsed, so the audience can "see" that the organization is something you have thought a lot about – i.e. there is a logic to the slides and they build upon one another.

Use of Technology

The audience should be able to read the text from the back of the room. You should spend less than 45 seconds per slide, and the slides should not be read to the audience. To avoid that, I suggest you don't write sentences but rely on bullet points as prompts. You should feel comfortable with the clicker – please come to the classroom and practice before the presentations to ensure you can move through your presentation seamlessly. If you rely on a cloud based program, be sure to have a back up plan in case the internet fails us.

Timeliness

You have 12 minutes to make your presentation. I will give you 3 min and 1 min warnings. At zero, you need to stop your presentation and take questions. I will stand up at zero and move toward you with each minute you are over. At 14 minutes, you will have to end, mid-sentence and there will be no time for questions.

"As you can see, it's business as unusual."

Figure 14: Clear thinking is correlated with clear communication.

Figure 15: The easiest way to manage your time is by rehearsing your talk and only covering one or two compelling conclusions. Better to cover one or two well, then several topics that are fully developed.

Appendix A – EA and Thesis Learning Outcomes

The following learning outcomes help faculty define the goals of the program and curricular design.

Environmental Analysis Outcomes

A student who majors in Environmental Analysis will:

- Understand the real-world processes and implications of environmental problem-solving and decision making.
- Apply relevant theory and approaches to clarify and respond to environmental issues;
- Read, critically evaluate, synthesize, and analyze a range of scholarly literature across disciplines;
- Conduct original archival, empirical and/or applied research, individually and collaboratively; and
- Speak and write clearly and persuasively.

Course Learning Outcomes

If the goal of environmental analysis is to contribute to our understanding of the environment, then the goal of writing is to efficiently communicate that understanding accurately and precisely.

As components of the projects, we will work to develop our skills as a writer of your research, skills that will contribute to learning of course material and to creating an identity as an EA graduate.

Writing exercises—both in class and out— will be used to explore the genre of a thesis and its components and develop our grasp of the knowledge that contributes to our projects. In this way, writing will be both a tool of communicating and a tool of learning. In addition, we will develop our skills as a writers, revisers, and editors—working with peers and instructor—and, ultimately, develop a solid foundation for writing up independent research.

To be explicit the writing component includes the following learning outcomes:

- Communicate clearly and effectively in writing;
- evince a clear understanding of and responsiveness to context, audience, and purpose;
- demonstrate understanding of disciplinary and field-specific conventions and expectations in written communication;
- produce writing that evidences intentional and controlled organization;
- employ and integrate supporting materials (research/evidence/data/examples/illustrations) appropriately, ethically, and credibly;

and
- demonstrate understanding of the ways in which punctuation and syntax affect meaning and an ability effectively to form and disambiguate sentences.

Figure 16: Only you know what it is really like!

Appendix B – Proposal Timeline

Introduction

Timelines are important in evaluating the feasibility of your project. Inexperienced researchers tend to underestimate the amount of time that the various stages of research will take. Be generous when working out time frames and check them with a more experienced researcher.

In order to do this, you need to map out what you will do and when you will do it. Consider the overall amount of time you have been given to complete the work, from start date to final product. Give an overview of when you are going to do each specific step of your project in order to collect your data. This does not need to be a day-to-day list, but it should give an overview biweekly or monthly of how you will meet your goals and demonstrate progress. Be sure to include time to review and synthesize your data or reflect on the overall study. You should include time to prepare the final research product as well.

You may need to set up two different types of timelines for this part of your proposal: one working timeline, the one that actually organizes you, and one proposal timeline, a more polished timeline that shows what you will be doing and submitting deliverables.

Figure 17: Now cut the timeline in 1/2!

Rationale

Developing a reasonable timeline provides several benefits. First, it allows you to appreciate the where and when products might require more time and if items need to be completed even if you don't think they are done.

Timeline Criteria and Standards

You will be evaluated for the following criteria:

Realistic Is the timetable realistic? Will you be able to start and finish your thesis by the deadlines? Does the timeline capture potential influences by external constraints or deadlines?

Completeness Have the objectives and deliverables been captured in the timeline?

Staging Have particular stages to the research been identified - e.g. piloting, then main research? screening interviews, then a main study? If there are stages, what are they? Are regular updates and progress milestones recognized in the timeline? How will you gauge progress?

Appendix C – Critical Thinking

Rationale

Critical thinking is one of the key goals in a liberal arts education. Skills in critical thinking allow us to engage in contested topics and navigate conflicting arguments and values. Like any skill, critical thinking requiring practice and effort.

Criteria and Standards

The points below provide a good way to evaluate critical thinking skills.

1. Selection or formulation of a question

   - Guides, shapes, and narrows the research/analysis
   - Suggests a complex, non-obvious answer
   - Uses precise, unambiguous language that is neither leading nor biased
   - Can be supported by research/analysis
   - Focuses on a dilemma or problem that is motivated and significant

2. Design or selection of a method(s) for addressing the question

   - Formulates a hypothesis or answer to the question
   - Breaks a problem into sub-problems
   - Selects or creates the method, language, bodily movement, theory e.g. designs an experiment, selects a movement language or choreography, picks an approach to translation
   - Approaches the problem using more than one method or theory
   - Derives the importable, testable implications of the theory

3. Interpretation

   - Applies the appropriate method, language, or theory
   - Demonstrates an awareness of how (not merely that) information (e.g. data, results, musical or written passages, etc.) can be interpreted in more than one way
   - Demonstrates an awareness of how (not merely that) historical, ethical, political, cultural, social, and environmental conditions influence ideas, events, and artifacts For example, how venue, gender, race, class, religion and a variety of other factors affect how one reads a work of art and thus that how the meaning of a single work can change.

- Demonstrates comprehension of the meaning or significance of experiences, sounds, colors, textures, situations, data, events, etc.
- Identifies the intended relationships among statements

4. Evaluation

- Demonstrates an awareness of the assumptions of a given model, theory, technique, language, etc.
- Demonstrate an understanding of how changing the parameters or assumptions (e.g. of a model) will influence the results
- Demonstrates an awareness of the limitations of a given model, theory, technique, language, etc.
- Identifies ways in which an estimation, theory, etc. may be biased or unreliable
- Assesses the credibility and strength of an account, belief, opinion, experience, description of a perception, etc.
- Recognizes missing elements of the evidence or that certain important factors were ignored
- Questions key assumptions (e.g. for plausibility, etc.)
- Identifies bugs in a program
- Distinguishes the intended and actual relationships among statements
- Assesses how useful or appropriate the data are to the research question
- Assesses which technique(s) is most appropriate for establishing causality
- Performs robustness checks of results

5. Connection of thoughts in a rational manner

- Makes inferences or establishes what the actual relationships are among statements, factors, or variables
- Presents ideas in well-ordered fashion
- Demonstrates an understanding of how an abstract idea, a principle, generalization or model applies to a particular or concrete case
- Demonstrates an ability to abstract, generalize, or develop a model from concrete or particular cases
- Appropriately compares and contrasts different theoretical perspectives, movement patterns, styles, languages, theories, particular cases, etc.
- Demonstrates an understanding of the relation of the parts to the whole
- Distinguishes cause and effect from correlation

- Demonstrates an understanding of the implications of theory, method, etc.
- Demonstrates how to correctly adapt a theory, method, etc. to new situations and information (including grammatical patterns and rules)
- Identifies useful future research that builds on one's results

Appendix D – Information Literacy

Introduction

We hope that every thesis demonstrate quality of attribution, evaluation, and communication of information literacy. According the the American Library Association, information literacy as a set of abilities requiring individuals to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information.

For our purposes, Honold Library has developed three categories that demonstrate information literacy:

Attribution refers to how well and consistently the student cites the ideas others, including non—traditional sources (e.g. lectures, emails, DVD commentaries) and images/figures.

Evaluation refers to the appropriateness or quality of source materials the student chooses to use to support their rhetorical goals (claims or arguments). This includes materials and sources in their bibliography (if available) as well as those used throughout the work. Do the sources, examples, and evidence selected match the purpose of the type of work and argument the student is creating? Is the student aware of the differences between primary and secondary sources, popular and scholarly sources, or fact and opinion? Have they selected the variety and quality of sources appropriate for their argument and work type?

Communication refers to the use and integration of sources, as well as, the quality of composition, e.g., whether the student has integrated the evidence they're using and has done so in a way instrumental to their claim(s) and argument(s). Does the student paraphrase, summarize, synthesize, use quotes appropriately? Does the student frame quotations using authoritative sources? How are they using sources to ground their claims? This category also addresses how a student integrates their own ideas with those of others. It's important to recognize that in some cases, sources need to remain anonymous, e.g. in the case of subjects protected by IRB protocols. Thus, thesis students need to appreciate their genre and external constraints to properly communicate their sources.

Rationale

Information literacy is a key skill for scholars – as it demonstrates that we have engaged in a conversation with other scholars. This

conversation is evidenced with citations, evaluation of the source, and appropriate attributions.

Rubric

Table 16: Information Rubric

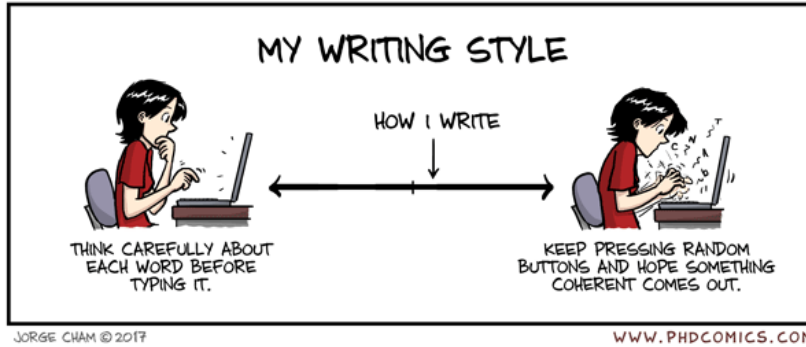| Learning Outcome	Level of Achievement			
	Highly Developed	Developed	Emerging	Initial
Attribution	Shows a sophisticated level of understanding for when and how to give attribution.	Attribution indicates understanding of the rationale for and various mechanisms of citation.	Missteps in attribution interfere with the argument or point to fundamental misunderstandings.	Use of evidence and citation is poor, making it difficult to evaluate the argument or sources.
Evaluation of Sources	Source materials employed demonstrate expertise and sophisticated independent thought.	Source materials are adequate and appropriate but lack variety or depth.	Source materials used are inadequate.	Source materials are absent or do not contribute to claim(s) or argument(s).
Communication of Evidence	Evidence is integrated and synthesized expertly to support claims.	Proficient synthesis and integration of evidence.	Weak attempts at synthesis or integration.	No evidence of attempt at synthesis or integration.

Appendix E – Scholarly Writing

Rationale

Developing writing skills takes practice, exactly like a craft or sports. You can have ideas in your head, but translating these to written text is far from a simple project. Table 17 is a grading rubric to evaluate the written work in the class

Writing Rubric

Table 17: Grading Criteria and Standards

Criteria	Developing ($\leq$ 3)	Proficient (4)	Mastery (5)
A. Thesis Statement(s)	1. Stating known information; 2. scope is unconstrained; 3. indefinite, unclear thesis statement; 4. unarguable or without articulated counter arguments; or 5. not presented early or largely undeveloped	1. Encourages interest of reader; 2. limited in scope; 3. definitive, clear thesis statement; 4. suggests ways that thesis can be arguable with counter arguments discussed; and 5. presented early and developed through most the text.	1. Grabs interest of reader in the opening sentence; 2. scope is highly focused; 3. definitive, clear thesis statement with defined terms; 4. demonstrates that thesis is arguable with carefully framed counter arguments; and 5. presented early and supported throughout text.
B. Structure	1. Unclear or confusing structure; 2. weak development of ideas or do not support thesis; 3. some links between points; and 4. organized with weak transitions between paragraphs.	1. Usually clear, logical, thorough presentation; 2. development of ideas that support thesis; 3. good links between points; and 4. organized with good transition between paragraphs.	1. Clear, logical, thorough presentation; 2. development of ideas that support, complicate, and expand thesis by considering counter-arguments and subtle problematic issues; 3. strong links between points; and 4. well-organized with excellent transitions between paragraphs.
C. Evidence	1. One or two lines of evidence supports thesis; 2. generally, factually accurate; and 3. not always presented in a reasonably readable, understandable, or logical manner.	1. Several lines of evidence support thesis; 2. factually accurate; and 3. presented in a reasonably readable, understandable, and logical manner.	1. Multiple lines of evidence that demonstrate detailed research; 2. factually accurate, and 3. presented in a very readable, understandable, and logical manner.
D. Analysis	1. Few or no critical, relevant, consistent connections among arguments, topics, subtopics; or 2. Seldom goes beyond a summary of evidence.	1. Generally critical, relevant, consistent connections among arguments, topics, subtopics; and 2. generally insightful and original, appropriate conclusions beyond a summary of evidence.	1. Consistently critical, relevant, consistent connections among arguments, topics, subtopics; and 2. excellent, insightful and original, appropriate conclusions beyond a summary of evidence.
E. Style (e.g. Concise writing, sentence flow and variety, diction)	1. Sentences are not concise, strong, or not expressive with varied structure; 2. unclear, illogical, or uneven presentation and development of ideas that support thesis; 3. weak transition between paragraphs; 4. writing is not smooth, skillful, coherent; 5. use of passive voice; 6. diction inconsistent and words not well chosen; or 7. use of specific and concrete diction that is inconsistent and unable to demonstrate an educated and mature tone.	1. Sentences are generally concise, strong, and expressive with varied structure; 2. Usually clear, logical, educated, and thorough presentation and development of ideas that support thesis; 3. good transition between paragraphs, detailing the clear connection from one point to the next; 4. writing is smooth, coherent; 5. rare use of passive voice 6. diction is usually consistent and words often well chosen; and 7. use of specific and concrete diction that may not be consistent throughout the piece but generally demonstrating an educated and mature tone.	1. Sentences are concise, strong, and expressive with varied structure; 2. lucid, logical, educated, and thorough presentation and development of ideas that support thesis; 3. excellent transition between paragraphs, detailing the clear connection from one point to the next; 4. writing is smooth, skillful, coherent; 5. no use of passive voice 6. diction is consistent and words well chosen; and 7. consistent use of specific and concrete diction that is both steady and good throughout the piece demonstrating an educated and mature tone.
F. Mechanics (e.g. Spelling, punctuation, capitalization; sentence boundaries; paragraphing)	1. Punctuation, spelling, capitalization are sometimes incorrect (few errors); 2. independent clauses are sometimes not correctly punctuated (sentence boundary errors) or distracts from main point; 3. sentences are sometimes incomplete or several thoughts; or 4. paragraphs have unconnected points that fail to support a topic sentence.	1. Punctuation, spelling, capitalization are correct (No errors); 2. independent clauses are correctly punctuated (No sentence boundary errors) without distracting from main point; 3. sentences develop a complete thought; and 4. paragraphs generally have coherent arguments that all support a topic sentence.	1. Punctuation, spelling, capitalization are correct (No errors) that support sophisticated sentence structure. 2. independent clauses are correctly punctuated (No sentence boundary errors) that support main points; 3. sentences effective develop a focused and complete thought; and 4. paragraphs have coherent arguments that all support a topic sentence without distracting points.
G. Supplemental Activity	1. Vague description of knowledge limitations; 2. limited identification of knowledge that might improve comprehension of the reading; 3. superficial description ideas of interest as might be expanded; and 4. summarized research completed to improve understanding on a topic.	1. Described knowledge limitations; 2. thoughtfully identified areas of knowledge that might improve comprehension of the reading; areas that were of interest; 3. described ideas of interest as might be expanded; and 4. summarized research completed to improve understanding on a topic.	1. Described specific knowledge limitations; 2. thoughtfully identified areas of knowledge that might improve comprehension of the reading; areas that were of interest; 3. described reasonable ideas of interest as might be expanded; and 4. summarized detailed research completed to improve understanding on a topic.

Appendix F – Originality

EA theses ideas are usually highly innovative, unusual and novel; ideas display inventiveness, often with unexpected or surprise twists; personality is highly reflected.

Rationale

Originality is what you bring to the thesis that makes it your project. This might be the due to the questions you have asked, the way you have chosen to answer the questions, or the results of the research. However, it's not a simple thing to assess and measure.

In general, when you do an experiment in the field or laboratory, its applied to a new circumstance. This might be original or the same-old. To distinguish between these two, the author must justify the experiment as original and compelling through a detailed literature review.

Originality   The question of originality plagues scholars of all levels. Anyone in the world of academics would be disingenuous to say that an academic work is ever entirely original. We all build upon libraries of information and resources that have come before us. An important part of academic work is acknowledging our debt to other scholars fully and clearly. Rather than asking if a thesis is completely original, ask if you can deal with a subject in such a way as to add to the conversation already begun on this topic. You will draw upon the research and ideas of many other scholars, creators, and thinkers, citing their work as you go. Your contribution may come out as a re-evaluation of the material, or as fresh perspective. You may not have that insight as you begin the project, but as a critical and creative student, you can find that element during your research. Remember, no two theses are alike, even if they deal with the same information and topic.

For our purposes, we will consider two axis:

Innovation refers to the process of ideation, evaluation, selection, development, and implementation of new or improved methods and/or analyses.

Creativity ranges from imitation to original creation:

1. Imitation: Is the creation the same or virtually the same as something that already exists?

2. Variation: Is it a slight change to an existing object, such that it is different, but still retains the identity of the original object?

3. Combination: Is it a mixture of two or more things, such that it can be said to be both or all?

4. Transformation: Is it a re-creation of something in a new context, such that it has some characteristics of the original object, but it cannot be said to still be that kind of object?

5. Original Creation: Does it appear to have no discernible qualities of pre-existing objects or ideas?

Innovation and Creativity are rewarded in different ways in different fields. Thus, it's up the the writer to demonstrate how even highly creative projects have their roots.

Considering the axes below, each student should make a visible statement with respect to how their thesis might "land" in such a space. Of course, you do not wan to refer directly to the figure in your thesis, but when your readers evaluate your thesis, they should be able to place your project in an originality space.[12]

[12] Originality Space

Creativity

Innovation

Criteria and Standards

Usually when these are evaluated, we are left with a feeling that it depends on the faculty's experiences – what one might find innovative another might find well-worn. Thus, there is a certain level of subjectivity to this category, nevertheless, your readers will evaluate your work based on how you articulate the following:

Innovative Demonstrate that the thesis is innovative by using literature as evidence, making an argument that the topics is fresh, exciting, and timely.

Creative Provides evidence that the project is appropriately creative, whether that it is unique or transforms other work or put it in new light. authors are present.
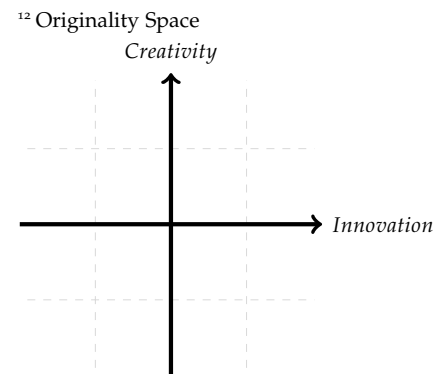
Table 18: Originality Grading Rubric

Criteria	Developing ($\leq$ 3)	Proficient (4)	Mastery (5)
A. Innovative	1. Thesis is not innovative or evidence has not be used to effectively argue that it is innovative; 2. Thesis does not appear to address new intellectual territory.	1. Suggests ways in which the thesis is innovative based on a gap in knowledge; 2. Makes an argument that the thesis topic is not stale or redundant.	1. Demonstrates that the thesis is innovative based on a gap in knowledge and using literature as evidence; 2. Makes a compelling argument that the thesis topic is fresh, exciting, and timely.
B. Creative	1. Suggest an imitation of other works and has limited creative engagement with the topic. 2. Project is so creative that is fails to be rooted in a scholarly tradition(s).	1. Suggests that the project is unique. 2. Makes an argument that the project is transformative of the scholarly tradition(s).	1. Provides evidence that the project is unique. 2. Provides evidence that the project transforms other work or put it in new light. .

Appendix G – The Public Presentation

Rationale

Evaluation Criteria

The EA Program faculty will evaluate the submissions using the following criteria:

- ...

Figure 18: Defending one's idea sounds daunting. But the public presentation is a good way to demonstrate your expertise and field questions about your work that you might not have time to develop or appreciated.

Appendix H – The Toni Clark Thesis Award in Environmental Justice and Gender

Rationale

Professor Toni Clark (1943-2016), who taught in the English Department at Pomona from 1983 to 2007, was a key figure in the creation of the EA Program. She was greatly respected both as an administrator and as a teacher. During her years at Pomona, Toni taught courses covering a broad range of subjects, from modern, post-modern and environmental literature to specialized classes on Chaucer, T.S. Eliot and Virginia Woolf. An avid gardener, she was also passionate about the environment and took the lead in creating the Race, Class, and Gender pathway in the Environmental Analysis major. She taught a coveted class in nature writing and literature, and advised many senior theses. This prize, established in loving memory of her many contributions to the program, will be awarded to the student whose senior thesis best exemplifies Professor Clark's keen insights into the complexities of environmental (in)justice.

Figure 19: Professor Toni Clark (1943-2016).

What Qualifies for the Thesis Award?

To be considered, the thesis will be concerned with understanding social inequality as experienced by members of multiple social groups, and/or their intersection, at the individual, group and structural level. The thesis may investigate a wide variety of social phenomena associated with social group relations in the United States and internationally from different theoretical and methodological perspectives including ethnography, demography and mixed (quantitative and qualitative) methods.

Environmental Analysis thesis can address the relationship to the environment with a range of topics such as African and African American studies, Asian American studies, critical race theory, gender and sexuality, health disparities, international migration, intersectionality, Latino/a sociology, race and culture, and individual and systemic racism and anti-racism. Additionally, the thesis might analyze how reproduction of racism in society, the racialization of Latinos, racial, ethnic and gender discrimination and stratification, racial and ethnic residential and occupational segregation, segmented assimilation, and immigrant incorporation all interact with environmental topics.

Submission to be Evaluated

Students who wish to be considered for the award will notify the Pomona College EA Program Coordinator by Monday, November 27, 2017 and provide a completed electronic version before the end of the semester.[13]

Please write a 500 word description that answers the following question: "How your thesis addresses environmental justice and gender?"

[13] NOTE: This award is open to students from any of the five colleges.

Evaluation Criteria

The EA Program faculty will evaluate the submissions using the following criteria:

- Thesis analyzes diverse social-group (such as race, class, gender, sexualities, ethnicity, religion) perspectives on environmental resources or hazards;

- Thesis evaluates the impact of dominant assumptions (such as race, class, gender, sexualities, ethnicity, and religious beliefs) on the social construction of nature, the built environment, and individual identities.

- Student understands systems of privilege (such as racism, sexism, class-ism, hetero-sexism, able-ism and colonialism) and environmental injustices within societal structures.

In addition, the successful thesis student will accomplish the following objectives:

Theoretical Grounding and Methodological Rigor Demonstrate that the thesis is rooted in theories and methods appropriate for the topic.

Engaged with Compelling Scholars Using a range of scholarly sources, thesis dialogues with scholars in various disciplines that evaluate issues of race, class, and gender.

Original Provides evidence that the project is original and independent.

Past Award Winners

2017 Nia McAllister (Pomona College), "Social Sustainability: The Role of Ecotourism in Regenerating Cultural and Environmental History in Rio de Janeiro's Communities on the Margins"

2017 Natalie Camrud (Scripps), "Race, Class, and Gentrification Along the Atlanta BeltLine"

Appendix I – Mindfulness for Thesis Writers

To Be Developed!

What is Mindfulness?

Mindfulness is a mental state achieved by focusing one's awareness on the present moment, while calmly acknowledging and accepting one's feelings, thoughts, and bodily sensations, used as a therapeutic technique.

What is your maxim?

break into groups of 4 (count off to six/seven).
   What do you want to prove/demonstrate!

Intention versus Goals

I believe it's useful to distinguish here between intentions and goals. When we make mindfulness a goal, we have — by definition— moved out of the moment.
   A goal is by definition not something that happens in the present moment, but is rather a future event. We "meet" our goals because we take the steps to achieve them. There is nothing inherently wrong with having specific things that you'd like to see happen in the future! The trouble comes in when you allow judgment to take root. What happens if you don't make that goal? We have created a discrepancy between what we're experiencing now and what we would like to happen. This inevitably leads to tension—we might begin judging our current experience (or ourselves) as "not good enough," "unacceptable," or "to be got rid of." Maybe it makes you feel like an underachiever. This is where the concept of working with intention can help. Intentions are something you can always come back to in the present moment.
   This judgment can put us off—as the caption for one of my favorite cartoons puts it: "I know I've only been practicing for two minutes, but meditation is not bringing me the peace of mind I was promised."
   When we make goals and measure our moments against them, we are virtually guaranteed disappointment.
   With an intention, there is no required result—we are simply connecting to our chosen course. "I'm just going to practice, and see what happens." Making mindfulness an intention is different. Intentions are found (and re-found) in the present, so just by making one,

you have already accomplished what you set out to do (well done, you!). An intention cannot fail, because it happens right now. With an intention, there is no required result—we are simply connecting to our chosen course. "I'm just going to practice, and see what happens." Therefore we invite curiosity, a sense of experimentation: "Well, this is interesting, I wonder what's going to happen now?" Intention has strength, as its rooted in reality, but also suppleness—holding to an intention doesn't mean our actions can't change, based on what we discover.

If you feel you've missed the mark, you can always come back to the intention in the present moment, in the way a guiding star helps a ship navigate home. Once you can see beyond the rigid binary of success or failure, you can see the rich spectrum of alternatives that exist in between these two extremes.

Intentions come from inside, whereas goals are external. In connecting to an intention, we don't have to look elsewhere for satisfaction—what we desire is already here as a seed within us. We may need some guidance and training to cultivate that seed, but relief comes when we realize we don't need to try and be something we're not.

Intention Practice

This is a practice to develop intention. We will take some time to develop a practice that we can use in this class and beyond your life here at the Claremont Colleges. But if you don't feel comfortable with this practice, **you may opt out.**

- Minimize distractions by silencing your cell phone and letting others know you need silence and privacy for a period of time. Find a comfortable, upright seat with your feet placed firmly on the floor (or a meditation cushion).

- Begin to breathe in slowly and deeply through your nose, exhaling with equal depth also through your nose. When you feel as though you've settled into a calm, centered, and relaxed state, bring into your awareness the area of life you would like to transform.

- Let your senses be awake, sensations in your body, be aware of your feelings, what is happening around you.

- Ask yourself about your morning here, what is your intention for being here. What is your heart saying?

  – What matters most to you?

  – What would you like to build, create, or nurture in your life?

- How do you feel when you are your happiest self?

- What makes you proud?

- What word(s) would you like to align yourself with?

- What fears would you like to release?

- What are you grateful for?

- Imagine your highest vision for your life, as if it has already happened, and you are presently living in this energy. For example:

  - How do you look?

  - How do you feel?

  - What are you doing?

  - Who is there with you?

  - What is happening around you?

- Make the vision as compelling and as real as possible. Your vision isn't something that needs to be created—it already exists within you. You just need to access it.

- When you have spent some time breathing into the being-ness of living in your vision, next ask your Higher Self, God, the Universe, or your intuition (whichever feels most appropriate for you) to show you a goal—or a few goals—that you will need to achieve to fully step into this vision of your life. Think of your goals as milestones along your path. What do you need to produce or gain in order to actualize your goal? Make a mental note of these things.

- Now, knowing that this goal must be attained for you to move closer to living in your vision, it's time to identify action steps to be taken each day or each week; perhaps there is a practice or some other support structures you may need to put in place to assist you in getting to where you're going. Ask yourself, "What do I need to do this week to move me powerfully forward in my life toward (your goal)?" Is there a daily practice you can be doing (e.g., meditation, exercise, healthy eating, develop different sleep habits, conscious communication, writing) to anchor you to your vision? Are there support structures you can put into place (e.g., join a writing group, meet with and advisor, or ask a friend for support) to help fortify your resolve and maintain your focus?

- With your action steps, support structures,and practices now in your awareness, it's now time to energize them—to set them in motion on your trajectory toward that which you desire. Visualize

yourself inside a picture or movie in your mind where you are see-ing yourself take action; you are feeling inspired and empowered because of the momentum you have gained and the progress you are making. As you look around, notice how your life has changed as a result of achieving your goal. As it all merges together, you realize that you are now living your highest vision for your life in this area.

- Now, step out of the picture or movie in your mind and imagine you are holding it in your hands. You no longer see yourself in-side the picture or the movie — you are looking in on it. Take a deep breath in through your nose and exhale the breath out your mouth, sending it straight into the image of you living in your highest vision. Do this four times to energize your intention with life-giving energy.

- Next, imagine that you float up above where you are now. Taking the picture of your highest vision with you, float out into your future and let it go—watch your picture float right down into your future-based timeline on or before the date you would like to actualize it. It's important to trust that it will land exactly where it's meant to. Notice how all the events between then and now reevaluate themselves to support you in bringing about your goals and vision.

- Float back down into now and spend a few moments following your breath in and out, settling back into your body, back into this moment in time. When you feel ready, slowly open your eyes and sit quietly for a few minutes reviewing your vision, the goals, and any action steps or practices you need to take or cultivate.

- Last, take out your journal and make some notes. What was the area of life you focused on? Write in detail about your vision and what you saw as being possible. Make some notes about the goals or milestones you will need to hit to make your vision a reality. Prioritize the goals, if there are more than one, and set start and end dates for them. Next, jot down the action steps, support struc-tures, and practices that will aid you in achieving your goals.

Post Practice Reflection

If you feel comfortable, share with a partner

Facing Uncertainty

We humans are very averse to uncertainty. In the face of an uncertain future, plans and strategies often function as a shield that we use to fend off the impact of those disasters we're afraid will befall us. Take a few moments to consider any sources of anxiety you might have right now. How much of that is in relationship to feelings of uncertainty about the future, anticipating things that haven't happened yet that may or may not come to pass? It's a tall order, and some people spend their entire lives working on it, but staying present in the face of uncertainty allows you to see that there are possibilities hiding in that chaos.

Uncertainty also often makes us feel like we need to jump at the first (job) opportunity that comes along, without weighing whether it's a good fit for us, or whether it serves our intentions. With a foundation of purpose, you can stay grounded in your values and respond skillfully, rather than react out of habit.

These are just a few of the ways that intention can help you bring a sense of purpose to whatever you do. Try it out yourself by articulating some clear intentions that might help open you up to your life and career. When considering how you relate to career and your sense of work/life balance, just ask yourself what purpose your actions serve. This can help you uncover the motivations you're already working with to see if they might help or hinder the intentions you hold. What are some of the intentions you've been working with?

Strategies for a Mindful Learning Process

1. Read successful theses kept by in the library collection of recent theses. These can offer models, inspiration, and reassurance.
2. Form a small group with other thesis writers
3. Writing for other student readers can help keep your style clean and fresh, and they can help you spot problems before you submit drafts to your advisor.
4. Join seminars and workshops on thesis writing
5. Don't let stress build up. A thesis is a high-stress endeavor. Don't become a victim of it. If you need to talk with someone, make an appointment with an adviser, or if necessary, visit the Health Center for help. Your physical and mental health comes first.
6. Exercise, eat right, and rest. Sounds simple enough, but it is very common for students to forget to do these things while in the throes of a thesis. Plan to include some sort of physical activity in your day. Many of the greatest thinkers were also avid walkers. A walk is sometime the best way to break writer's block or to stave

off a bout of anxiety.

7. Share your work. Scholarship is meant for publication. Make multiple copies for friends and family. Attend a thesis symposium if your department offers one. Or, look for campus-wide symposia. Better yet, submit a proposal for a conference. You can't get accepted if you don't apply.
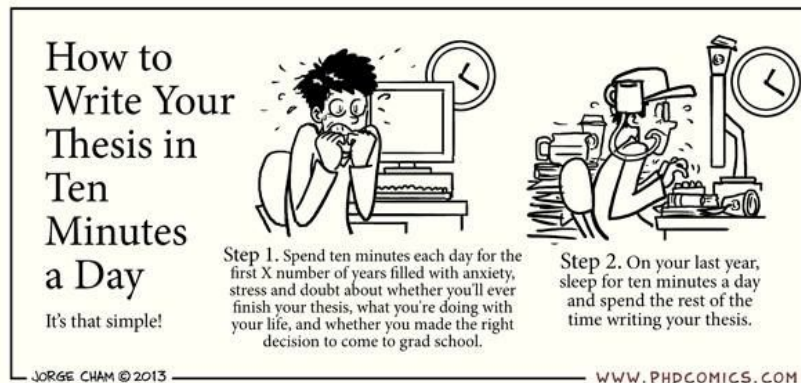

Figure 20: Many strategies are helpful and many are not.

Organizing and Process Checklist – Minimizing Stress

Self compassion practice

The Problems of Tasks Checklists   Some students do well with checklists – others find them as a source of stress and all the tasks build up and become an unbearable critique on ourselves. Why is this?

Probably because we misjudge our capacity to complete our tasks – because we have a false sense of optimism about our skill, we might get easily distracted, we procrastinate, or we are depressed. In my experience it's a combination of factors, which in the end can be the source of depression!

Over the semester, we will work hard to tackle these issues, and over time, I will add to this section to provide some tools for other classes.

marc

Intentions and Learning Outcomes

How do our intentions map onto goals and strategies? How do we discern our success?

Musical Folder Exercise

Please start with the question highlighted in your folder. Read the questions and reflect on how you might answer it for 30 seconds before writing anything down. Using bullets list several answers for the questions.

1. When you hear the term, "critical thinking" what comes to mind? What is evidence of critical thinking?

2. What are some characteristics of information literacy (use of primary sources)?

3. What are some characteristics scholarly writing?

4. What are some characteristics of independent and original works, while engaging scholarly works?

5. Describe characteristics of work engaged with issues of race, class, and gender?

What are the implications of failure? We need to discern what are our limitations and acknowledge when our
   Kristin Neff: Overcoming Objections of Self-Compassion
   Self Compassion Practice

Working with Advisors

Our advisors are used to doing things in certain ways. Often these are 'projected' onto their students. As role models this can be very valuable as you write your proposal. Even more important, is by understanding these patterns of advising, it will help you negotiate expectations and improve the overall process and product. The questions below have been developed to help you think about what your advisor is modeling. These are also great questions to ask your advisor, as suggested by Clark (2006). Even if you don't know the answer, guess something for each question. This is also helpful because it will give you a good idea of what might be the parameters in which they might answer.

1. Do/did they expect you to have a clear idea for a thesis from the beginning? What is their process to develop clear ideas? How was that modeled for you?

2. What theoretical or methodological approaches do they think are most important?

3. What do they consider to be the most important critical issues in their discipline?

4. How do they approach problems or issues in their discipline?

5. Do they have particular strategies for organizing their thoughts and taking notes that they think are particularly useful?

6. What models of theses do they think are especially successful?

7. How do they usually instruct students to break down the components or elements of a thesis? How does the proposal fit into that process? How does the literature review fit into that process? How might they value these processes?

8. How does your advisor evaluate your understanding of the discipline/disciplines of interest?

9. How do they prefer to structure the writing process? Do they prefer you to submit each chapter/section as you write them? Or do they prefer to receive large segments?

10. What kind of feedback do they feel is most valuable? What kind of feedback do they usually provide?

11. How do they find articles for their work? Do they suggest articles, books, or other resources they think should be included?

12. How do they recommend you work with other faculty readers? Do they thinks you should submit copies to your other readers at the same time you give them materials? Or would they rather submit larger sections? Or do they want you to wait until you have finished a few drafts?

Writing Workshop

Goals, purpose, and writing understandings

1. What is the writer's explicit purpose in this section?

2. What hidden assumptions or prejudices are implicit in the text?

3. What stance does the writer seem to be taking towards the audience?

4. What stance does the writer seem to be taking towards the content?

5. What does the writer understand about academic writing?

6. What does the writer understand about academic research?

Word Choice

• Precision and Accuracy?

• Strong Verbs?

• Superfluous Words

A large proportion of (many)	Absolutely essential	Absolutely necessary
Advance forward	Advance warning	Added bonus
Admission of responsibility (admit)	Almost unique (Unique)	Alternative choice
Attach together	At this moment in time (now)	Basic essentials
By virtue of the fact that (because)	Close proximity	Close scrutiny
Collaborate together	Consensus of opinion	Combine together
Entirely eliminating	Exact replica	Exactly the same
Free gift	Future plans	In conjunction with (and)
In order to (to)	In the absence of (without)	In the event that (if)
Join together	Joint collaboration	Leaves much to be desired (poor)
Made good their escape	Merge together	Minute detail
New innovation	On account of the fact that (because)	Oblong in shape
Patently obvious	Personal opinion	Plummet down
Prior experience	Placed under arrest	Put in an appearance
Razed to the ground	Revert back	Sahara desert (Sahara means desert)
Shorter in length	Surrounded on all sides	Successful achievement
Sudden impulse	Sum total	Technical jargon
Temporary reprieve	Tiny speck	Top priority
Unexpected emergency	Unexpected surprise	Was of the opinion that (thought)
With the exception of		

And the words, very, totally and completely are often redundant!

Logic

What is the argument being made? What is the evidence/data?

Arguing that absolutism lacks practical value, Toulmin aimed to develop a different type of argument, called practical arguments (also known as substantial arguments). In contrast to absolutists' theoretical arguments, Toulmin's practical argument is intended to focus on the justificatory function of argumentation, as opposed to the inferential function of theoretical arguments. Whereas theoretical arguments make inferences based on a set of principles to arrive at a claim, practical arguments first find a claim of interest, and then provide justification for it. Toulmin believed that reasoning is less an activity of inference, involving the discovering of new ideas, and more a process of testing and sifting already existing ideas—an act achievable through the process of justification.

Toulmin believed that for a good argument to succeed, it needs to provide good justification for a claim. This, he believed, will ensure it stands up to criticism and earns a favorable verdict. In The Uses of Argument (1958), Toulmin proposed a layout containing six interrelated components for analyzing arguments:

Claim (Conclusion) A conclusion whose merit must be established. In argumentative essays, it may be called the thesis.[11] For example, if a person tries to convince a listener that he is a British citizen, the claim would be "I am a British citizen." (1) Ground (Fact, Evidence, Data) A fact one appeals to as a foundation for the claim. For example, the person introduced in 1 can support his claim with the supporting data "I was born in Bermuda." (2) Warrant A statement authorizing movement from the ground to the claim. In order to move from the ground established in 2, "I was born in Bermuda," to the claim in 1, "I am a British citizen," the person must supply a warrant to bridge the gap between 1 and 2 with the statement "A man born in Bermuda will legally be a British citizen." (3) Backing Credentials designed to certify the statement expressed in the warrant; backing must be introduced when the warrant itself is not convincing enough to the readers or the listeners. For example, if the listener does not deem the warrant in 3 as credible, the speaker will supply the legal provisions: "I trained as a barrister in London, specialising in citizenship, so I know that a man born in Bermuda will legally be a British citizen." Rebuttal Statements recognizing the restrictions which may legitimately be applied to the claim. The rebuttal is exemplified as follows: "A man born in Bermuda will legally be a British citizen, unless he has betrayed Britain and has become a spy for another country." Qualifier Words or phrases expressing the speaker's degree of force or certainty concerning the claim. Such words or

phrases include "probably," "possible," "impossible," "certainly," "pre-
sumably," "as far as the evidence goes," and "necessarily." The claim "I
am definitely a British citizen" has a greater degree of force than the
claim "I am a British citizen, presumably." The first three elements,
"claim," "ground," and "warrant," are considered as the essential com-
ponents of practical arguments, while the second triad, "qualifier,"
"backing," and "rebuttal," may not be needed in some arguments.

When Toulmin first proposed it, this layout of argumentation was
based on legal arguments and intended to be used to analyze the ra-
tionality of arguments typically found in the courtroom. Toulmin did
not realize that this layout could be applicable to the field of rhetoric
and communication until his works were introduced to rhetoricians
by Wayne Brockriede and Douglas Ehninger. Only after Toulmin
published Introduction to Reasoning (1979) were the rhetorical appli-
cations of this layout mentioned in his works.

Data ——> Claim

Data ———-> Claim
  ⇑
  Warrant (Since)

Data ———-> Claim
  ⇑
  Warrant
  ⇑
  Backing (On account of)

Data ———-> Qualifer, Claim
  ⇑
  Warrant
  ⇑
  Backing

Data ———-> So, Qualifer, Claim
  ⇑   ⇑
  Warrant Rebuttal (unless)
  ⇑
  Backing

Data ———-> So, presumably, Qualifer, Claim
  ⇑   ⇑
  Warrant   Rebuttal (unless)
  ⇑
  Backing

Appendix J – Planning an EA Thesis – 2nd Year to Graduation

The description of the process has been written in the summer of 2017. I will ask for suggestions from the 2017 class and then post it on the EA website to help other students prepare. Please think of things you wish you had heard before enrolling in EA 191.

Preliminaries – When should I start my thesis research project?

As students have reflected on the process, here are some suggestions they have generated. Although most students will not follow the timeline below exactly, it still provides a good structure to consider:

Sophomore Year Starting to weigh options

- Begin to collect ideas, books, and faculty advice on topics that interest you.
- Consider your work in each course as a possible field of inquiry for a thesis.
- Declare your major and select an advisor.
- Meet your advisor and discuss your course plan and ideas about thesis topics.

Junior Year Developing and applying research skills

- Intensify the search for courses, faculty mentors, and topics of special interest.
- Take courses that include research methods, e.g. EA30
- Discuss your developing research ideas with professors who can advise you.
- Select a topic and write a proposal (see the refsec:proposal section for more information).
- Discuss your proposal with professors, one of whom who may become your thesis advisor.
- Enter into a reasonably firm agreement with a thesis supervisor, and discuss plans for summer research.
  NOTE: If you study abroad during your spring semester, try to make thesis arrangements with faculty advisers before you go abroad. Exchange emails messages with your adviser while you are away.

Senior Year EA191 – The EA Senior Thesis

- Enrolling in EA191 requires that you submit a pre-proposal to the instructor.
- Make an appointment with your supervisor/first reader in the first week of schedule as described in Appendix .

- Check with the program coordinator, and follow their directions closely.
- Follow your checklist closely, leaving ample time to finish without last minute agonies.

Frequently Asked Questions

Can my research include human subjects, interviews?   Any student using research with human subjects must receive the approval of from the IRB Committee **before** any work is done with human subjects. For more information see Pomona's Research Involving Human Subjects webpage `https://www.pomona.edu/administration/academic-dean/` `research/regulatory`. Research results that are collected without an IRB can not be used for a thesis.

Can I do research on animals?   Yes, but depending on the taxa/taxon, you may be required to get a permit. In particular, any research on vertebrates must have a IACUC permit – before you begin any research that involved animals. See Pomona College's IACUUC page: `https://www.kecksci.claremont.edu/Students/IACUC.doc`.[14]

Can I do field work?   Permits from USFS (US Fish and Wildlife Service) or DCFW (California Department of Fish and Wildlife) require collecting permits or permits to modify a stream bed. County or other municipalities (such as flood control districts, mosquito abatement districts, etc) may also require permits. I suggest you start thinking about this months before you endeavor any research.

Funding: Can I get funding for thesis research?   There are various research college and department/program sources of funding to help with undergraduate theses. The EA Program has given research awards, especially under the auspices of summer research RA and SURP funding sources. These are usually based on multi-year research projects, but sometimes funds are available for one-semester thesis projects.

You may need to do some footwork to find out more; I suggest you contact the program coordinator and your thesis advisor for suggestions. Usually, a proposal and letter of recommendation from your advisor are required.

Pre-Proposal

Step One: Reflection   A senior thesis should be based on something that has interested you during your pursuit of an undergraduate degree. Often, a thesis topic grows from a persistent question you

[14] I don't know why I can't find Pomona's page, but this page for Keck Sciences is a good start!

have studied or even written about in a course you valued. How does this question connect with other things that interest you? Often it is best to talk with a friend, professor, or adviser in your department. You must get used to talking about your ideas as soon as possible.

Step Two: Focus   After you have traced several branches of your main idea, choose one of these and pare away all excess material. This aspect may be your thesis topic. The best test to see if this idea can be made into a thesis is to prepare an abstract.

Step Three: Writing a Pre-Proposal   To receive approval to enroll, students are required to submit a pre-proposal that describes your background and interests. Although your topic may change over the spring and summer, this written statement allows the researcher to begin considering his/her project in the context of the summer, when there might be an opportunity to complete a major portion of the research. See Section Pre-Proposal and Annotated Bibliography to prepare the Pre-proposal.

Précis

To develop a deep understanding of the literature, students will be reading peer-reviewed journal articles. For this assignment you will practice writing concise expositions based on a succinct analysis of a peer-reviewed, scholarly journal article. See Précis section for more information.

Literature Review

To successfully define the scope and research questions, we need to understand the current literature and knowledge on the topic. The literature review will be used to develop, constrain, and justify your work. See Literature Review for a description of the literature review.

Revised Thesis Proposal

A formal proposal is a refined synopsis of your proposed thesis topic. A well-composed proposal guides your research and writing. It also helps you engage a faculty supervisor, and it is required for research funding. The proposal is broken down into the following questions/topics:

• Thesis statement
• Problem Statement, Questions to be Answered, and Purpose
• Method(s) or Theoretical Model

- Audience
- Implications
- Timeline

A good proposal usually goes through several drafts, and it will go on changing even while your write the thesis itself. It is essential that you get feedback from readers you respect at every stage of proposal development. See the Thesis Proposal section for more details on how write the Revised Thesis Proposal.

Writing & Revision Process

Plan Writing Goals   Although some goals are hardwired into the class, use the following list to as a suggestion to develop more detailed milestones as part of your proposal:

1. Submit revised proposal to thesis adviser (Deadline: Sep 19).
2. Complete bulk of the research and reading phase (Suggested deadline: Sep 28).
3. Complete draft of introduction and detailed outline and (Suggested deadline Oct 26th).
4. Compete chapters and sections (Suggested deadlines: Nov. 2nd).
5. Revise introduction and conclusion (Suggested deadlines: Nov. 7th).
6. Submit of first completed draft (Deadline: Nov 16).
7. Submit of final draft for last reading and faculty assessment (Suggested deadline: Dec 5).

Writing Workshops   As part of the course, the instructor will bring written thesis products to be reviewed and discussed as a class. These may include précis or sections of a literature review, thesis drafts or previous thesis submissions.

Peer Review Process   Peer review will be used extensively in this course to promote the development of high quality theses and interaction between students. See Peer Review for more information on this topic.

Draft and Final Revised Thesis

Students will submit their 1st thesis submission to their 1st Reader and the EA 191 instructor before Thanksgiving. Please note, this is not a rough draft – but a revised and polished thesis. It will be graded strictly and demonstrates that you on your way to successfully completing the course and graduation requirements. The

suggestions and comments that come from your reader and EA191 instructor are designed to improve the product, but can't rescue projects that are incomplete or undeveloped. Because the 1st submission counts as a portion of the course, you run the risk of not passing if the submission is not sufficiently polished.

The final version will be submitted to the 1st and 2nd reader who will work with the EA191 instructor to assign a final grade for the thesis.

What is the Grading Process?

At the end of the semester, the the thesis (1st and 2nd) readers will complete the rubric and discuss each senior thesis with the EA 191 instructor. Thesis grades will be decided by the faculty with emphasis on the written thesis (original and revised), accuracy and sophistication of analyses, and will include weighting from the public presentation, Intro/Methods/Reference sections, effort, improvement, attendance at meetings, ability to meet deadlines, etc.

Public Presentation of Thesis Research

The final step is the senior presentation where summarize the results of their research at a public venue late in the semester. Please note that these presentations are formal, and must be delivered in a professional manner. The Senior Thesis presentations this year are likely to be held in an appropriate space within the Edmunds Building. The amount of time for each student depends on scheduling considerations and the number of students in the course. The presentations are open to all interested persons from within and outside the department. Neat, professional attire is required!

Appendix K – EA 191 Instructor Preparations and Timeline

Preparing for Fall Class – Timeline

March 1 Develop list of Junior EA majors at PO, CMC, SCR, and HMC

March 15 Email all EA Juniors with a Call for Pre-proposals (see template below)

XXX Check with Registrar that course time and permissions are correct (i.e. by permission only)

May 25 EA Senior Thesis Proposals due to Instructor

May XX Grant PERMs to students who have submitted Pre-proposals.

Invite Librarians to Second Class (see below) to instruct students in the latest research technologies; reference citation tools; supply list of librarians whose fields correspond to students' theses

Aug 15 Thank EA Thesis Readers, with detailed email on timeline and expectations.

Summer Send periodic emails to rising seniors checking in on their research progress

August 15 Email Thesis Readers about expectations and timelines for the theses (see template attached)

First Class

Syllabus – post/handout with timeline for completion of chapters; submission of full draft; final presentations (see CM's template attached)

first assignments

revise and resubmit original Thesis Proposal (all change over the summer, focusing especially on the thesis statement and question); read two theses from the previous years and write short critique of them t be submitted on Second Class; see template below.

1. http://scholarship.claremont.edu/ (link filed under Claremont Scholarship on the library homepage)
2. On this page scroll down slightly, in the middle of the page, to the "Browse Research and Scholarship" section
3. Click on These and Dissertations
4. Click on Pomona Senior Theses

You'll see a list of titles by year. We don't publish the grade with the thesis. You could probably browse the titles for interesting/relevant topics and skim the thesis to estimate the quality of the thesis.

NOTE: Several EA senior theses have received a Library Undergraduate Research Award. Below is a list of these:

Second Class

Students report on their reactions to previous theses
librarians discuss research and reference tools available.
Learning Outcomes:

1. Activity on Inquiry (searching databases, Library Search, archives, grey lit., gov. docs.) Learning Outcomes

   • Students will define or modify the information need to achieve a manageable focus.
   • Students will identify keywords, synonyms, and related terms for the information needed.
   • Students will identify a variety of types and formats of potential sources of information.

2. Activity on Evaluation- but will discuss primary vs. secondary, scholarly, peer-review, etc. Learning Outcomes:

   • Students will identify the purpose and audience of potential resources (e.g., popular vs. scholarly, current vs. historical).
   • Students will examine and compare information sources in order to evaluate reliability, validity, accuracy, authority, timeliness, and point-of-view or bias.
   • Students will determine whether information satisfies the research or other information need.

3. Introduction to Zotero and talk about Attribution Learning Outcomes

• Students will differentiate between the types of sources cited and understands the elements and correct syntax of a citation for a wide range of resources.
• Students will select an appropriate documentation style and use it to consistently cite sources. Allegra used to go in to talk about uploading to Scholarship at Claremont and the idea of digital scholars (their work being available for the world to discover).

Assignment: Thesis writers develop an annotated bibliography of the most salient books/articles they intend to use for their theses (submit Third Class); see template below

Third Class

Speed Thesis Maxims   Create two linear lines of pairs. One line of students will migrate and tell their partner what they intend to "prove." While the other partner asks, "what evidence will you use to prove this?" and "how does this prove your case?"
  – Writing Workshop Begins

Final Presentations

historically have been on the Friday evening and Saturday after Thanksgiving Break.

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