

Course Web-Site

http://www.pelagicos.net/classes_graduate_seminar_fa09.htm

COURSE ANNOUNCEMENT- Fall 2009



Graduate Seminar I
NSCI 6110



(Fridays, 13:00 - 15:00)

Graduate Seminar I is designed to help MSMS students plan their academic career at HPU and start their thesis research. This will include exploring potential research projects, forming a thesis committee, and conducting a review of the scientific literature pertinent to the student's research project.

Graduate, 1 Credit, Instructors: Winn & Hyrenbach

Course Web-Page

Last Updated September 8, 2009

Having problems?

Email me:

[khyrenbach \(at\) hpu \(dot\) edu](mailto:khyrenbach@hpu.edu)

- Syllabus
- Schedule
- Presentations
- Handouts
- Papers

Syllabus

Resources

Annotated Bibliography

Mind Map

Conceptual Model

Presentations

Assignments

Annotated Bibliography

Instructors

Dr. Chris Winn

The Cottage, Oceanic Institute

Office hours:

F 10:00 - 12:00

or by appointment

Dr. David Hyrenbach

CTSA 112, Oceanic Institute

Office hours:

M 9:00 - 12:00

F 15:00 - 16:00

Goals for Today

- Announcements - OI Biosecurity Overview
- Group Discussion - Literature Reviews
- Introduction to HPU Library Resources

Literature Reviews - Goals

- What is a Literature Review ?

Overview and synthesis of the "body of knowledge" making up a specific subject area

Evaluates research materials (articles, books, "grey literature") published on a particular subject
(Identifies strengths and weaknesses of published studies)

Contributes to greater understanding of the total scholarship written in a particular subject area
(Identifies key themes, problems, controversies and trends)

Places specific concepts / ideas in a broader context
(Identifies multiple perspectives and future research directions)

Literature Review - Audience

A review paper demonstrates that the writer has a thorough understanding of the literature and can formulate "meaningful" hypotheses (novel research)

While no new research is presented by the writer, the readers benefit from the summary & synthesis

Literature Reviews - Approach

- The 5 "classical" approaches for writing a review:

State of the art

Historical

Comparison of perspectives

Synthesis of disciplines

Theoretical model development

Literature Reviews - Outline

The 6 main sections of a review paper are:

Title Page

Provide an informative and "catchy" title.

Abstract

Brief summary of main points of your review.
Gives the readers a chance to preview your paper.

Introduction

Introduce your topic, state the topic's relevance, reveal your thesis (your objective). Engage the readers.

Discussion

Don't just summarize; Analyze, Synthesize, Interpret.
Relate the discussion to your thesis.

Conclusions

Illustrate key connections between major points and thesis, as well as between thesis and broader research field.
What is the significance of your paper in a larger context?
Do not to present new information in the conclusion section.

References

Standardized format and completeness are critical.

Literature Reviews - Examples

Understanding biogeographic patterns in marine systems requires integrating data from many disparate disciplines (e.g. systematics, ecology, oceanography) gathered over multiple temporal scales (e.g. seasons, years, decades) (McGowan 1990, NRC 1996, Pierott-Bults 1997). In 1997, the Alfred P. Sloan Foundation, in conjunction with the National Oceanographic Partnership Program (NOPP), initiated the ambitious 10 yr 'Census of Marine Life' (CoML) to enhance the biogeographic and ecological understanding and appreciation of marine biodiversity (Ausubel 1999). This initiative seeks to answer 3 basic questions: What used to live in the sea? What currently lives in the sea? And what will live in the sea?

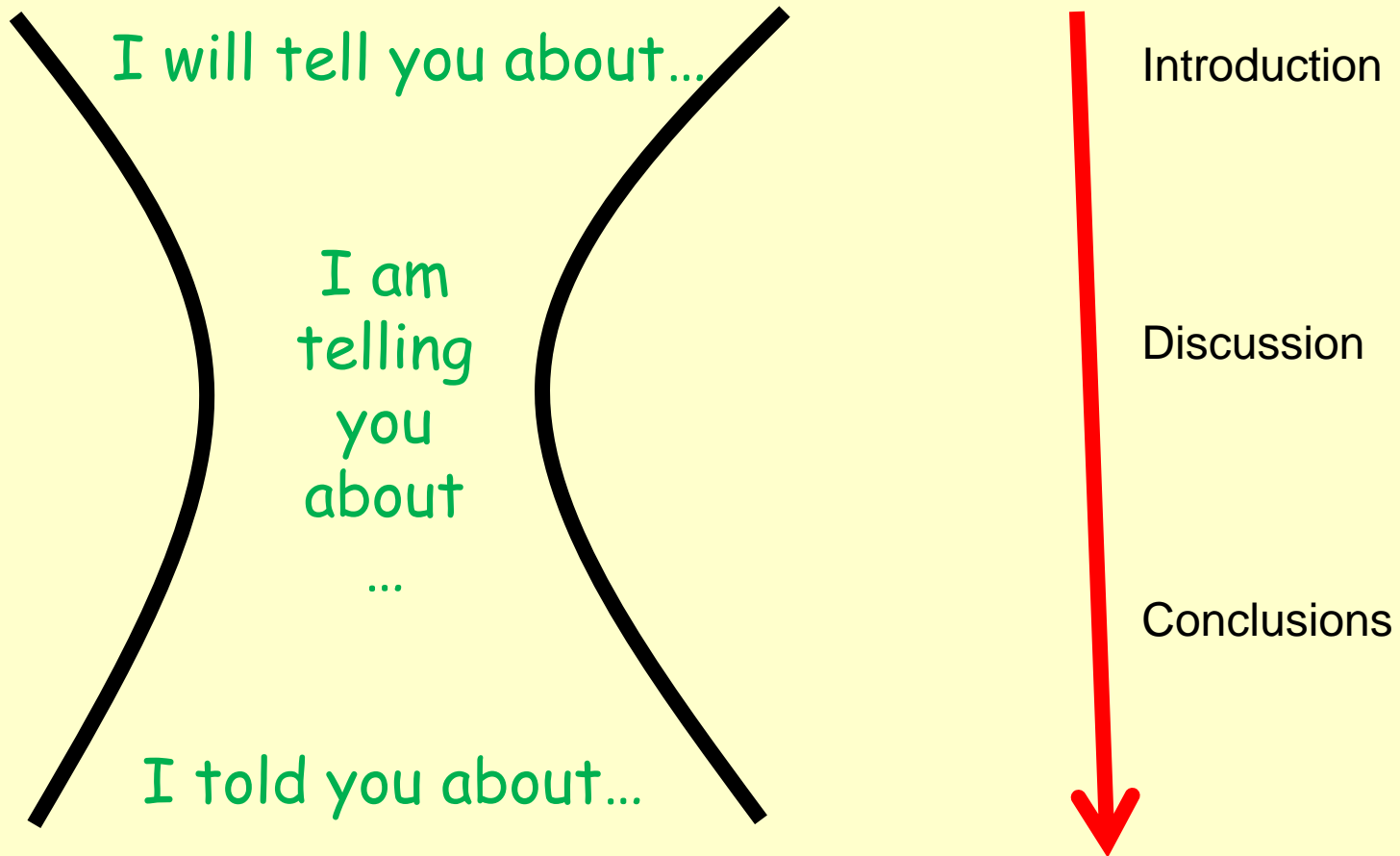
We hope the world community will respond to this growing crisis with the innovative integrated management of entire ocean basins. Such management might be modelled after other successful international agreements, such as the Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR) or the International Whaling Commission (IWC). These agreements are far beyond the scope of this paper. Our intention is to argue that in principle large-scale reserves can be applied to the highly dynamic marine habitat, and can offer important tools for such ocean basin management.

Literature Reviews - Examples

In this review, we summarize the development and progress of satellite tracking studies for large marine vertebrates over the last two decades, assess the current status of this rapidly evolving field, and discuss future challenges associated with the use of satellite tracking technology, especially for threatened and endangered species.

We present a review of the development of cetacean–habitat models, with an emphasis on the challenges inherent in and unique to studies of marine ecosystems. *This paper is organized according to the primary steps involved in the modeling process.* Specifically, we begin with a discussion of the purposes for which cetacean–habitat models are developed and a general overview of scale issues in marine ecosystems, ... Methods of estimating cetacean abundance and collecting habitat data are discussed as the primary foundation for modeling efforts... Finally, we discuss different approaches for model selection and evaluation.

Literature Reviews - Scope



Literature Reviews - Closure



Make sure you tie the knot !!!

Literature Reviews - The Process

Choosing a research topic → Working with advisors

Locating relevant information → Lydia Lee (Library)

Evaluating content → Class Paper Discussions

Synthesizing knowledge

Summarizing insights

→ Mind Map
Annotated Bibliography
Review Outline

Literature Reviews - Hints

Key considerations for writing a review paper

Choose an informative and "catchy" title:

Engage the audience:

Keep your focus clear and narrow:

Analyze, synthesize, and interpret:

Tie the knot:

Document your sources:

Literature Reviews - Checklist

Does your literature review...

- clearly state the objective in the beginning?
- emphasize key findings of previous research?
- highlight important gaps in research / knowledge / data?
- discuss trends and themes of the research related to the topic?
- describe relationships between key concepts of the cited works?
- identify inconsistencies or contradictions among the cited works?
- discuss why some studies / methods were insufficient / inadequate?
- express your opinion regarding quality / importance of cited works?
- provide a summary of the main findings?
- conclude as to why / how the topic should be further studied?
- revisit the stated objective at the end?

Assignment for Sept 25

Discuss potential "key" papers with advisor -
submit 2 articles to instructors (**pdfs**) via email

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