

# Tips on Reading Assignments for GEOL0160: Monsters of the Abyss: Oceanography and Sea Tales

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## 1 Contacts

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Some portions of the website are password-protected to ensure that fair use and copyrights are correctly obeyed as I share images from books, etc. You can access these by using:

username: io

password: ocean

## 2 Getting Help!

I am usually available by email. My office hours this semester will be most Mondays and Wednesdays 1:30-2:30PM. You can also request an appointment at other times. Just check my calendar at <http://fox-kemper.com/contact> and suggest a time that works for you.

Erica Thieleman, our CAP fellow, will also have office hours on most Fridays 2:30-4 in GeoChem 134. She will be helping you with finding journaling topics, preparing your classroom discussion leading, drafting, and peer reviewing, and you can reach her at [mailto:erica\\_thieleman@brown.edu](mailto:erica_thieleman@brown.edu).

Finally, we have two writing fellows for the class (Sienna Zeilinger and Simon Henriques). They will also be offering help with your draft papers.

## 3 General Comments on Reading

Before you get worried about reading assignments with journaling every week as well, let me explain the thought process behind the reading. You will notice that the reading assignments precede what we will be talking about in class. Thus, I expect you to do a skim-read of the chapters at least *before the class*, so that you can follow along in class.

### 3.1 Skim Reading: Fiction

SPOILER ALERT!! Skimming fiction is tricky, as one aspect of good fiction is the suspense building along the plot lines. However, until recently (e-books), books were designed to open to any page. Thus, the author, editor, and publisher do expect, and presumably plan for, you flipping to later pages without

spoiling the surprise too much. However, before you take on a book or a chapter, it is certainly a good idea to gauge how long the reading assignment/chapter/book is, what resources you have (maps at the back? table of contents? index?), \*before\* you dive into the story. This will help. Also, the difficulty in skim-reading fiction is the reason why we are only reading complete works of fiction.

However, if you are really thinking hard about a work of fiction, as we will be in this class—at least for short excerpts—then you will be reading certain passages again. So, what I mean for skim reading of fiction is a first reading, which doesn't necessarily involve taking notes or rereading passages after you see what comes next. Save that work for when you reconsider the book and start planning your papers.

Finally, what's the role of note-taking and journaling during this process? Well, you might copy over an excerpt that you like as you skim read, but not comment on it at first reading. Later, after the discussions in class or reading farther, you might start to discuss this excerpt. Indeed, this process is the structure of the first paper!

### 3.2 Skim Reading: Narrative

You will quickly find in reading the narratives that parts of it are just totally not your thing. Should you dwell on this? Should you slow down and struggle through, thereby risking not completing the reading before class? No! Unlike a work of fiction, where each word is crafted and each paragraph helps set the pacing, writers of narratives sometimes just fill in what happened every day or every few days just to keep the reader following along on their real-world timeline. The real world is filled with long, boring patches interspersed with (usually) brief moments of horror, joy, terror, and revelation.

Based on this, it is clear that skimming through the narrative reading assignments in advance of a front-to-back linear reading will be beneficial in spotting where to focus your time and effort. On a second pass through, you can adjust your speed of reading and note-taking based on how far you plan to go and your skim-reading assessment of where the good stuff is.

All of our narrative reading will be selected from much longer works describing years of these explorers lives. Part of the job of skim reading is figuring out how the selected moment fits into the larger scope. So, you should also study the table of contents and maybe introductory remarks to identify where the selection fits into the whole.

### 3.3 Deep Reading: Fiction and Narrative

After you have done your skim reading, you should go back and do a deeper reading. The deeper reading will involve note taking and/or journal entries, and repeated reading of the most important parts. Why should you read the important parts more than once? They won't change. Well, *you* will change between readings! Understanding the larger context for a conversation between two characters changes the way we understand that conversation. Understanding the later consequences of a critical decision (e.g., where the food was stored or how the sled dogs were housed) will change the way you appreciate those passages.

### 3.4 Skim Reading: Science

Scientific writing is done in a *very nonlinear* fashion. Generally, a science article is written kind of middle out. The experimental apparatus gets built and described, then the first experimental results are tabulated, then new hypotheses are made, then new equipment is set up for the next experiment addressing these, etc. Then a paper is written which *rejects the chronological order of the experimentation in favor of a logical, systematic ordering*. Why? So that efficiency and clarity are optimized (albeit usually at the expense of excitement).

Many of you have little experience reading scientific material. Good modern scientific writing (like the kind in a few readings I've assigned and the kind you will be writing and reviewing) is laid out in

a formulaic way, so a busy scientist is able to quickly glean the content without a linear reading from beginning to end. Here's how I do it:

### 3.5 Scientific Book Reading: Nonlinear Method

1. Read the book title.
2. If I don't understand the book title, read the preface or other introductory materials to figure it out.
3. Read the chapter titles.
4. If I don't understand the chapter titles, read the first and last couple of paragraphs in each chapter to figure it out.
5. Read the section titles.
6. If I don't understand the section titles, read the first and last couple of paragraphs in each section to figure it out.
7. Find the important figures, graphics, definitions, theorems, lemmas, or boxed sets of equations and read their captions.
8. If I don't understand what these indicate, find the point in the text where they are referenced and read those paragraphs.
9. Read the key concepts outline at the front and back of each chapter if there is one.
10. If I don't understand the key concept listing, find the paragraphs where I can figure it out.
11. Find additional important language and terms being introduced.
12. In all of the above, there will sometimes be keywords or foreign words offset in bold or italics, or repeated technical terms that are unfamiliar. Skim backward and find the first instance they are used (where, if the writer is any good, they will be clearly defined). If they are not defined, look them up online.
13. Read the most important derivations or paragraphs from beginning to end.
14. Read the most important sections from beginning to end.
15. Read the whole chapter/article from beginning to end.

Only when I really need to understand the material, like if I plan to reproduce the experiment described, do I make it to step 11. I usually have done step 4 before I even buy or borrow the book. Before class, I would expect you to do up to step 10. I expect you to have reached step 8 as you enter any journal entries based on this reading assignment. I would expect you to get to step 10 either while writing or revising your paper. I do not expect you to reach step 11 at all, unless of course you really find it interesting.

### 3.6 Scientific Article Reading: Nonlinear Method

Similarly, when reading a scientific paper, you should (in descending order):

1. Read the title and author list.
2. If I don't understand the title, read the abstract and keywords (if any) to figure it out.
3. Read the section titles
4. If I don't understand the section titles, read the first and last couple of paragraphs in each section to figure it out.
5. Find the important figures, graphics, definitions, theorems, lemmas, or boxed sets of equations and read their captions.
6. If I don't understand what these indicate, find the point in the text where they are referenced and read those paragraphs.
7. Find additional important language and terms being introduced.
8. In all of the above, there will be repeated technical terms that are unfamiliar. Skim backward and find the first instance they are used (where, if the writer is any good, they will be clearly defined).
9. Read the most important derivations or paragraphs from beginning to end.
10. Read the most important sections from beginning to end.
11. Read the whole article from beginning to end.

Usually, you can get to 5 within a few minutes, and decide if it's worth the effort to go further.

## 4 An Important Lesson

For those of you keeping track, you'll note that this reading method has a lot to do with the way I suggest you organize writing your papers. If you write like that, others will be able to read like this!