

Writing a Scientific Literature Review
ENT 770 - 3 credits
Spring 2014

Instructor	Jason Harmon Jason.Harmon@ndsu.edu	269 Hultz Hall (701) 231-5083
Office hours	Thursdays 10:45-12:00 and by appointment.	
Prerequisites	No prerequisites for graduate students.	
Meeting times	9:30-10:45 Tuesdays and Thursdays in 272 Hultz Hall	

Bulletin description

Explore how and why to create a scientific literature review in this writing intensive class. Hands-on exercises will help improve scientific writing, peer-review, and self-assessment while working throughout the semester to create your own review.

Course objectives

1. Describe the reasons why scientists write scientific literature reviews.
2. Locate, summarize, and critically evaluate information from the scientific literature.
3. Practice effective scientific writing principles.
4. Make substantial progress on an original review over the course of the semester.

Required student resources

Machi, L. A. and B. T. McEvoy. 2012. *The Literature Review: Six Steps to Success*. 2nd Edition. Corwin Press, Thousand Oaks, CA.

Schimmel, J. 2012. *Writing Science: How to Write Papers That Get Cited and Proposals That Get Funded*. Oxford University Press, Oxford.

Evaluation procedures and grading criteria

Since the primary goal of this course is for each student to make substantial progress on his/her own literature review, assignments will be based (either directly or indirectly) on developing and improving the review. It is not necessarily expected that by the end of the semester each review is ready to include in a thesis or be submitted for publication. Given the constraints of the semester, students may not be able to cover the breadth or depth of topics needed for publication. However, it is expected that students will go through all the steps of writing a scientific literature review and have a substantial “product” at the end of the semester.

To develop the literature review students will do multiple assignments/exercises that are specifically related to 1) the skills needed to write a review and 2) making progress on the semester long review project. There will also be multiple evaluations of the final project itself, including drafts of various sections, self-assessments, peer-reviews, and a final presentation of the work in written form (and perhaps oral form).

As students are reading and critiquing the literature for their reviews, they will also create multiple short summaries of scientific articles in the form of blog postings.

Classroom discussions will be based on the steps in producing a literature review and on the specific assignments performed to support those efforts. Points for discussion participation will be based on the quality of the participation and how it furthers the discussion. Quality participation is based on student preparation, authentic and respectful participation, furthering discussion, and asking thoughtful questions.

As part of the participation grade, all students will be required to visit the NDSU Graduate Center for Writers at least twice during the semester (<http://www.ndsu.edu/cfwriters/>). By making an appointment with the center you will be able to work with a writing counselor to help you work on a specific part of your review and help improve you as a writer. Dr. Enrico Sassi will visit the class on 1/16/14 with more information about the center.

Criteria for grading

Participation in Class Discussions	150 points	15%
Regular assignments (10-20 pts each)	250 points	25%
Blog posts (10 x 10 pts each)	100 points	10%
Final project (all pieces)	<u>500 points</u>	<u>50%</u>
Total	1,000 points	100%

Pieces of the final project include outlines, writing assignments, drafts of sections, peer reviews, and the final version of the literature review.

Grading System

A ≥ 900 points; B = 800-899 points; C = 700-799 points; D = 600-699 points; F < 600 points

Attendance Statement

According to [NDSU Policy 333](#), attendance in class is expected. Since much of the class will be discussion based, attendance and participation are both important parts of the grade. Students can have two unexcused absences without losing any points. However, students who miss class are still responsible for turning in assignments due that day and for completing assignments due the next class period. After two unexcused misses, a student will lose 20 points (2% of your **total** semester-long grade) for every additional class missed.

Late work

Any assignment turned in after the due date/time will be marked down 10%. For every week the assignment is late, another 10% will be marked off the grade given to the assignment until the end of the semester. If an assignment is not turned in by the date of the final exam it will be graded as a zero. The final version of the semester long project will be due on the date of the final exam. If that is not turned in on time it will receive a zero unless special arrangements are made ahead of time.

Tentative class schedule

Two quick notes. First, topics will often run between classes. For example, we may sometimes bring up a topic one class, do an assignment related to that topic, and then discuss assignments the following class. Second, this is a tentative schedule because I want to give the class the flexibility of modifying things based on how the class is progressing.

January 14	Introduction
January 16	Plagiarism
January 21	Review purposes & examples
January 23	(Step 1) Selecting your review topic
January 28	(Step 1) Selecting your review topic <i>continued</i>
January 30	(Step 2) Searching the literature
February 4	(Step 2) Searching the literature <i>continued</i>
February 6	(Step 4) Surveying the literature <i>continued</i>
February 11	(Step 4) Surveying the literature <i>continued</i>
February 13	(Step 4) Surveying the literature <i>continued</i>
February 18	(Step 5) Critiquing the literature
February 20	(Step 5) Critiquing the literature <i>continued</i>
February 25	(Step 3) Developing your argument
February 27	Refining your topic & lit search
March 4	(Step 6) Write the review
March 6	Science writing as storytelling
March 11	<i>Class canceled</i>
March 13	Story Structure
March 18	<i>Spring break</i>
March 20	<i>Spring break</i>
March 25	Outlines
March 27	Peer reviews and discussions
April 1	The opening / introduction
April 3	Introductions <i>continued</i>
April 8	Challenge & action
April 10	Challenge & action <i>continued</i>
April 15	Methods & results
April 17	Methods & results <i>continued</i>
April 22	Resolution & discussions
April 24	Resolution & discussions <i>continued</i>
April 29	Internal structure
May 1	Paragraphs, sentences, & flow
May 6	Editing
May 8	Editing <i>continued</i>
May 16 th	8:00am – Final exam scheduled, final version of your literature review is due

Additional statements

Academic Honesty: All students taking any course in the College of Agriculture, Food Systems, and Natural Resources are under the Honor System (<http://www.ag.ndsu.edu/academics/honor-system-1>). The Honor System is a system that is governed by the students and operates on the premise that most students are honest and work best when their honesty, and the honesty of others, is not in question. It functions to prevent cheating as well as penalize those who are dishonest. It is the responsibility of the students to report any violations of the honor pledge to the instructor, honor commission or the Dean of the College of Agriculture, Food Systems, and Natural Resources. All work in this course must be completed in a manner consistent with NDSU University Senate Policy, Section 335: Code of Academic Responsibility and Conduct (<http://www.ndsu.edu/fileadmin/policy/335.pdf>).

Students with special requirements: Any students with disabilities or other special needs, who need special accommodations in this course are invited to share these concerns or requests with the instructor as soon as possible. The instructor may ask for verification and that, plus other assistance, can be requested from Disability Services in Wallman Wellness Center 170 (231-8463). <http://www.ndsu.edu/disabilityservices/>.

Veterans and military personnel: Veterans or military personnel with special circumstances or who are activated are encouraged to notify the instructor as early as possible.

Plagiarism

Plagiarism is a very serious issue in the classroom and something that is equally important issue in scientific research. To put it bluntly, scientists throw away their entire careers by plagiarizing. At the beginning of the course we will discuss what plagiarism is and how to avoid it. Discussions in classes 1 & 2 and the first assignment will provide adequate training on plagiarism so that you will be able to avoid it in this Week and beyond. However, *if you are ever confused or unsure about whether something constitutes plagiarism* **ASK!**

If I believe plagiarism has occurred on an assignment you will have a chance to meet about it, but if I believe the plagiarism was deliberate or extensive you will receive no points for the assignment and a Student Academic Misconduct Tracking Form will be filed as per NDSU policy 335. Excessive instances of plagiarism and/or multiple offenses will receive additional harsher punishments up to and including moving to have the student expelled.