SCHOLARSHIPS IN SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS (S-STEM)

ENGLISH 185 Science Writing, Fall 2015

Course Prerequisite: Grade of C or higher in English 101

Section: 8531 **Time:** Fridays 9:30-12 **Classroom:** MSA12
Instructor: H. Bailey-Hofmann **Office:** GC 280E **Office Phone:** 310-287-4547
Email: baileyhh@wlac.edu **Online Site:** http://myetudes.org
Office Hours: TTH 10-11, W 10-1 and by appt.

Course Description

This is a course in writing in, and about, the natural and physical sciences. Students will study documents such as abstracts, research proposals, and journal articles, will analyze the development of disciplinary writing practices, and will study non-fiction science writing for general audiences. The skills you master are essential preparation for the natural and physical science academic and career pathway.

Course Goals

Students will learn to:

• Recognize standard conventions governing scientific writing and their influence on the organization, use, and distribution of scientific knowledge and information;

• Communicate specialist knowledge and information to non-specialist audiences;

• Study, critique and apply strategies used in science popularizations;

• Examine the role of science in public communication and debate.

Course Texts

Scanned scientific articles and resources will be provided free of charge.

Recommended:
Ambrose, Harrison W., Katherine Peckham Ambrose, et. al. *A Handbook of Biological Investigation. 7th Edition.* Knoxville: Hunter Publications, 2007.

Student Learning Objectives

To successfully complete this course, students will be able to:

- Read and critically evaluate scholarly scientific material from a variety of sources;
- Identify and analyze the structure of the texts read;
- Learn to write effectively for different audiences and purposes, either mainstream or scholarly.

CLASS POLICIES

Disabilities

If you have any learning or physical disabilities, please contact the Disabled Student Programs and Services Office in HLRC 121 at (310) 287-4450. The DSPS will then contact your instructors to notify them of needed accommodations, such as additional testing time, note taker, etc. Do not be embarrassed to seek help. Disabilities are not a reflection of who you are, but of how your brain works. Understanding how you learn is to the first step to success.

Standards

You are responsible to buy your books, do your own work, read your syllabus, and complete the assignments. It is not my responsibility to inform you what assignments are late or missing. You have the wonderful opportunity to take a class, learn things, expand your mind, and get my feedback to help you improve your writing. **Attendance is worth 25% of your grade**. That's roughly 5 points per class (not counting the symposium).

But what if there are extenuating circumstances?

There always are! Nearly every WLAC student works 40 hours a week. We all have personal responsibilities: bodies that get sick, cars and computers/printers that break down, loved ones that get sick and (heaven forbid) die. Some have families and children to attend to. This is a given. That's what makes it necessary to manage time and plan ahead in order to succeed!

We all go through tough times, myself included, which is why I can sympathize with your troubles, but I cannot make exceptions. There's nothing that feels as good as a grade that you earned, despite difficulties. If your 'extenuating circumstances' become too overwhelming, withdraw and take the course at a more convenient time (if you can find one!)

Dropping the course

According to college policy, you may be excluded for excessive absences or for not following the Standards of Student Conduct (printed in the Schedule of Classes). If you drop the course, be sure to do so at the Admissions and Business Offices. Otherwise, the grade drops to a "D" or "F" and cannot be removed. Pay attention to drop dates in the Schedule of Classes.

ASSIGNMENTS

ETUDES

As a supplement to this class, an online ETUDES-NG site will be available to enrolled students. (Students adding the class will have a delay in access.) This site will feature lecture content, handouts, etc. and is a helpful resource for the class. You can access our class Etudes site at: http://myetudes.org/portal For help logging in, contact the Distance Learning Office at 310-287-4306.

Written Assignments

I do not CORRECT essays. Your instructor "evaluates" assignments and makes suggestions for improvements in organization, use of evidence, critical thinking, and style. There will be no corrective remarks on a proofreading level; only general remarks. **Spell Check can be turned on in Microsoft Word at Tools>>Options>>Spelling and Grammar.**

Assignment Format

All work must be typed. Format is standard MLA: 12 point Times New Roman double-spaced, 1 inch margins. Other fonts will not be accepted. Please teach yourself how to use headers and footers and number your pages with your last name and the page number. Title pages/binders are not necessary; just head the first page in the upper left or right-hand corner as follows:

Student Name
Date
Course
Professor's Last Name

Plagiarism

Understand and avoid plagiarism – you can also refer to this website re. plagiarism: http://www.indiana.edu/~wts/wts/plagiarism/htm *You must turn in your own work* (not a "modified" paper submitted for another class) and cite your sources appropriately, using MLA Style. We will go over MLA Style, but you are also expected to refer to your handbook for details relating to in-text citations and Works Cited. **Plagiarism is unacceptable and will result in a failing grade for the assignment.**

Grading

- Homework Assignments=70%
- In Class Exercises= 5% of your grade.
- Participation, Attendance=25%

Assignment 1 for First-timers: Observing Structural Conventions of Science Writing (Adapted from James Collier)

Learning Goals

The purpose of this assignment is for you to analyze and compare selected aspects of science writing for other colleagues in the discipline as opposed to readers in a mainstream audience.

The assignment's main goals:

- Examine critically the image of science conveyed in selected popular media;
- Examine critically the conventions of science writing in the scientific disciplines
- Assess writing strategies used to convey specialist knowledge and information to a lay audience
- Detect strategies found in science writing to use in your own work.

Instructions

First, choose a resource (a web site, a popular science magazine, the popular science section of a newspaper, the *New York Times* science section for example, or academic journal) that serves as an outlet for popular science writing. I have scanned some samples for you if you wish to use them. Some other sources might be:

Science Notes Essays, Popular Mechanics, Popular Science, Scientific American
National Geographic, New Scientist, DISCOVER Magazine, Science Daily
ScienceNews, Technology Review Smithsonian Magazine

Second, choose one of the scanned articles written within the discipline (Bahta, Recht, Zuk, etc.)

Read each article and then complete the following questions for each one:

1.Introduction: Address the purpose of the guidelines and offer an introduction to the resource you have selected.

2. Subject Matter: What is the subject matter of the resource and of the articles in it that you have read? Does the article use specialized terms and lingo or more inclusive language? Give examples.

3. Context: What is the purpose of the articles in this resource? What, specifically, is this resource trying to address in dealing with science? What should an author know about the context of this resource in writing an article for it?

4. Style and Structure: What is the style and structure of article that are submitted to this resource? You may want to provide specific examples (e.g., specific passages and sentences).

5. Documentation: How are quotes used? What kinds of sources do authors usually cite?

6. Miscellaneous Items: What other differences are there in features provided, or lack of features; language choice, etc.?

Assignment Two for First-timers: Process Description (Adapted from James Collier)

Please write a 750 to 1250 word, double-spaced, description of a technological artifact, or of a scientific or technical process, for HowStuffWorks.com.

First, take a look at published "How ... Works" articles on HowStuffWorks.com. Through a close reading of sample articles identify the form of the article, the intended audience, the style employed, the level of technical discourse and jargon, and the use of visual images and hypertext links.

Second, choose a technological artifact or scientific or technical process the web site's audience will find interesting and with which you are familiar. While the originality of your submission is highly valued, you may find articles on the site cover, to some degree, the same subject in which you are interested. No matter. If the artifact or process you choose has been described in a previous article, you can offer a unique approach or perspective not found in the article (e.g., describing more or less fully an aspect of the technology or the process than the article or adopting a different point of view). Ultimately, what qualifies as "unique" is left to your discretion.

Requirements

- **Due:**
- **Length:** 750-1250 words.
- **Format:** Use MLA (Modern Language Association) format.

Grading Criteria (By James Collier)

A paper

The overall presentation shows a high level of understanding and perspective, is well-conceived and descriptive, and shows a clear understanding of the audience. The work's purpose and objectives are clearly and convincingly stated. Concise background material clearly sets the context, frames, and introduces the subject. Themes are logically stated and organized and support the overall objective. Content is detailed and suggestive. Conclusions are persuasive and well-supported by the evidence. The prose is easy to read. Exhibits a defined sense of unity and purpose. Includes topic, paragraph, and sentence transitions, and contains no major and few minor grammatical or technical errors. Graphics, when used, are highly informative, well-designed, and easy to interpret.

A- Generally means you meet all criteria for an 'A' except presentation and problems with one or two criteria. Audience and purpose may be clear, for instance, but you failed to develop a central idea.

B paper

Paper presents content clearly and displays a firm grasp of the material but without as much focus and perspective as an 'A' paper. Successful effort is evident throughout the paper, but there may be slight inconsistencies in identifying audience. The work's purpose and technical objectives may be somewhat ill-defined. Background material sets the context, frames, and introduces the subject. While well-written and adequately detailed, some sections may lack complete development and coherence, or show unevenness in presentation and content. No major grammatical errors; some minor grammatical errors but none that disrupt an easy reading of the paper. Graphics are informative, intelligible and support the content of the paper.

B+ Exceeds the criteria for a 'B' in one or more areas. For example, the purpose of the paper may possess greater clarity. Audience is clearly identified and the contexts governing the explanation and interpretation of the information are well-detailed. Greater consistency in execution than a 'B'; better paragraph development and coherence among sentences for example.

B- A lack of connection among, for example, audience and purpose. A number of presentation errors affect the meaning of the sentences or structure of the text. A somewhat stronger relationship among the elements of the paper -- audience, purpose, content, style -- than a "C" paper. Still, the paper lacks full development of ideas and demonstrates some problems weaving together a complete understanding of the content with a clearly identified audience, purpose, and context.

C paper Displays a reasonable grasp of the content but little original thought. The purpose of the work is inconsistently presented. The audience cannot be clearly identified. While understandable, the purpose and objective are not presented in relationship to the context set in the opening. Treatment of the topic is general. Lapses exist in coherence, organization, and development. Contains errors in developing and presenting content (inadequate, or wrongly understood, facts and arguments). The content marginally supports the conclusion. There are major grammatical errors and frequent minor grammatical errors. The paper is difficult to read and lack flow. Graphics do not support content objectives.

C+ Exceeds the criteria for a 'C' in one or more areas. More imagination may be needed in thought and explanation. Greater consistency in determining audience, purpose and objective. Fewer errors in technical content and somewhat greater coherence in the presentation and the conclusion. Fewer grammatical and cosmetic errors. An easier read than the 'C' paper.

C- The elements of the paper — audience, purpose, content, style — are unclear and appear unrelated. For example, a wiki article about a weapons controversy may deal with a number of different systems in only a cursory way. No explanations are given about how the topics of the paper lead to one another. Presentation errors suggest no revision.

D (of any variety) or F paper

I will let you revise 'D' or 'F' papers until you receive, minimally, a 'C-'. You have the choice of whether or not to revise. If you choose not to revise, you will receive a failing grade.

Any work plagiarized in part or in full will receive 0 points.

English 185 Tentative Class Schedule

YOUR SCHEDULE WILL CHANGE BY THE FIRST DAY, BUT THE WORK LOAD WILL NOT BE MUCH DIFFERENT THAN THIS.

Day	Activities	
Class 1 **Oct. 2**	9:30- All-- Introductions and Course Overview	
	Newbies	**Returning Scholars**
	10:00 Common Structures of Science Writing	10:00 Prepare "Elements of a Scientific Research paper" for newbies
	10:30 Elements of a Research Paper	10:30 Rejoin newbies and teach lesson
	11:00 TBA	11:00 TBA

	Homework: 1. Read assigned readings; 2. Complete Assignment One! (on syllabus) 3. View Week 1 Module Content	**Homework:** 1. View Week 1 Module Content 2. Metawriting 3. Research Article Comparison Activity
Class 2 **Oct. 9**	Newbies 9:30 Conciseness & Exact Language Exercises 10:00 TBA 10:30 Returning Scholars Presentation 11:00 TBA **Homework:** Active Vs. Passive Voice Exercise online	Returning Scholars 9:30 Share homework findings 10:00 Prepare assigned lesson 10:30 Teach lesson to group **Homework:** TBA
Class 3 **Oct. 16**	Newbies 9:30 Building a Journal Article Integrating Data Using Tables and Illustrations 10:30 Writing for Scientists vs. Writing for a Mainstream Audience **Homework:** Assignment Two (on syllabus): Take care to use active, not passive, voice!	Returning Scholars 9:30 Share homework findings 10:00 Prepare assigned lesson 10:30 Teach lesson to group **Homework:** Finalize final research article and bring draft to class workshop with prof.
Class 4 **Oct. 23**	Newbies 9:30 Elements of an Abstract Sample Abstracts (of Classmates!) 9:45-ish Present findings to prof. Common Science Writing Mistakes **Homework:** TBA	Returning Scholars 9:30 Draft Workshop with prof. 9:45-ish Continue work with each other **Homework:** Take any questions to subject mentor and submit final product to both HBH and mentor.
Class 5 **Oct. 30**	Present work to each other in preparation for symposium. Define roles for symposium and plan presentation.	
Nov. 6	**Symposium *Please move heaven and earth to be on time!***	