

**ENGR 500 Research Methods
Fall 2014 Syllabus**

**“Improving the quality of writing actually improves the quality of thought”
(Gopan and Swan, 1990)**

Course Goals: In this course, you will gain the research skills needed to plan and implement an independent research project. You will learn about the research/writing process and the connections between writing and thinking/learning, and the essential components of scientific/engineering research documents, such as theses, dissertations, research reports, and research or thesis proposals.

The process of writing generates insights and connections that help direct your research as you are doing it; in fact, the act of writing supports critical thinking and helps you solidify your thoughts. As such, we will engage in a series of writing exercises this semester, culminating in a final writing product that is a research plan for a hypothetical project or a thesis (or doctoral) research project. This research plan will be presented in class as part of the Final grade.

Course Learning Objectives/Outcomes: Upon completing this course, students will be able to do the following:

- Use Internet search engines/databases and other library resources and tools to find appropriate references to support their research.
- Understand the principles of clear and effective scientific/engineering writing.
- Write a research plan (or alternate writing product as approved by the instructor).
- Give an oral presentation of their research plans, theses, or thesis proposals.
- Critically assess written and oral research reports, theses, dissertations, proposals and journal articles.

Instructor: Donna Welch,

Phone: (208) 891-4505

E-mail: donnarwelch@gmail.com or donnawelch@boisestate.edu

Office MEC 202S

Class Location and Time: Engineering 314, Monday, 10:55 – 11:45am.

Please NOTE: Classes on 9/8, 9/15 and 9/22 will be held in Albertson’s Library, Room 203.

You may wish to bring your laptop, but this classroom is equipped with computers.

Office hours: Mondays, 10-10:50 or by appointment.

E-mail is an excellent way to get in touch with me.

Required Texts:

- *Enjoy Writing Your Science Thesis or Dissertation*, D. Holtom, Imperial College Press, 2000.
- *Standards for Preparation of Dissertations, Theses and Projects in the Graduate College*

Format for Written Work

Writing assignments that are handed in should be double spaced with 12-pt font and 1-inch margins. All pages must be numbered, and references properly cited according to the style used in each student's discipline. Documents should be properly formatted according to the type of document (guidance will be provided). All documents must be spell-checked and carefully proofread prior to submission.

Grading:

Your final grade is based on:

Miscellaneous assignments (5% each)	20%
Writing project assignments	40%
Presentation	20%
Peer review of writing products	10%
<u>Attendance/Participation</u>	<u>10%</u>
TOTAL	100%

Grades will be posted on Blackboard. Please check periodically for errors or omissions. The grading scale is: > 93 % = A, 90 % - 93 % = A -, 87 % - 89 % = B +, 83 % - 86 % = B, 80 % - 82 % = B -, 77 % - 79 % = C +, 73 % - 76 % = C, 70 % - 72 % = C -.

Note: you must complete all of the assignments to pass this course.

Extra Credit There are no additional assignments offered for extra credit.

Student Code of Conduct: It is my responsibility as an instructor to notify the Student Conduct Office of any suspected student misconduct, including exam cheating and plagiarism. It is your responsibility to know what plagiarism means. For more information, see the Boise State University Student Code of Conduct:

<http://www2.boisestate.edu/studentconduct/studentcodeofconduct.htm>

Typical plagiarism "oversights" are:

- Copying whole sentences from a web site without restating in student's words or without quotation or citation.
 - Paraphrasing ideas of another author without attempting to write an "original" sentence.
- The sanction for academic dishonesty in this class will be an automatic "F" for the course.

Attendance Policy: According to Boise State University policy: "You are responsible for attending courses for which you are enrolled. You are also responsible for making up any work you may have missed by failing to attend class, even if the university approved the absence, necessitated by illness, or necessitated by a personal emergency. In this sense, then, there are no "excused" absences." Please note that absences reduce your potential for class participation, and therefore, may reduce that portion of your grade. Please notify me by email about any absence as soon as possible.

First Assignment:

- 1) Please meet with your thesis advisor and borrow a thesis or dissertation that relates to your thesis topic, or locate one on the internet in your area of interest. Make sure it is at your same degree level (MA or PhD). Read it for next class (9/8) and be prepared to write a critical review of it the following week.
- 2) Read the BSU Graduate Handbook and bring any questions to discuss at our next class.
- 3) REMEMBER to go to Albertson Library, Room 203 for next class.