WR 462/562 Science Writing
4 credits

Rationale for conversion: the conversion will give students a greater opportunity to engage with the field of science writing, including print and electronic and digital publishing sites as an aspect of information literacy. Students will be required to interview scientists outside of class to gather information for assignments. In addition, a service learning project may be required.
The four credit version will:
• add an ethnographic assignment on writing conventions employed by scientists in the field;
• add instruction on research and writing using electronic and digital sources appropriate to the advanced study of science writing;
• add a service learning option for graduate students.
The core description below is for the three credit course the last time the course was taught, but the outcomes and assignments reflect updates for the four credit version.

Course Description from OSU Catalog:
Reporting and writing about science and technology. Interviewing scientists and interpreting scientific information. PREREQ: Upper division standing. Recommended: previous experience with WR 327. May be repeated to form a 9-credit sequence.

This course will examine the theory and practice of scientific writing. Students will learn the basic principles for writing lab notes, lab reports, and research articles. They will also learn how to write essays targeted for general audiences. The course will also briefly examine the theory, history, and pedagogy underlying scientific discourse.

This course will cover such areas as health, technology, agricultural and animal science, and environmental, computer, engineering and life sciences, with special emphasis on the field in which the student is working and/or fields in which OSU excels. The focus is on writing text and thus differs from WR 327 in that formats (reports, proposals, presentations, etc) are not the focus. The course will also address the evolution of disciplinary writing strategies and practices as well as the role of science writing in the public realm.

Learning Outcomes for students in WR 462:
The basic goals of the course are:
• Learning to present scientific information in appropriate language for various audiences, including scholarly and general, in print and online.
• Understanding of the needs of various audiences/readerships and how these needs affect the style, vocabulary, and content of writing.
• Recognizing the conventions governing the dissemination of scientific knowledge
• Understanding the origins of scientific writing styles
• Learning to write concisely, concretely, and accurately to present complex scientific ideas clearly.
• Increasing information literacy for finding, evaluating, integrating and synthesizing necessary information for the completion of a project.
• Learning to work with scientists.
• Learning to effectively and ethically incorporate appropriate scientific exhibits (graphs, charts,
etc) to supplement text.

- Learning to workshop, revise text, respond effectively to your peers’ work in progress and participate in collaborative learning activities.

Competence in the mechanics of writing is essential, including use of appropriate documentation styles including APA, CBE, Chicago, etc.

Graduate students will be expected to do an additional service learning project in a science field.

**Grading and evaluation:**

- Ethnography on conventions in science writing (15%)
- Essays on a topics in science writing (50%)
- Research essay on digital sources appropriate to the advanced study of science writing (15%)
- Attendance and participation in group process and revision (20%)

**Evaluation of Student Performance:**

The grade for the 462 course will be based as follows:

- Annotated bibliography / review of literature….. 20%
- Shorter Article………………………………………... 20%
- Longer Article………………………………………. 25%
- Book Review………………………………………... 10%
- Interview ………………………………………….. 20%
- Other………………………………………………... 5%

Graduate students taking the class as WR 562 will add a 4-6 page research project and 10-15 minute class presentation, for example into the evolution of documentary conventions or the role of third person in scientific writing.

**Possible Texts to be used:**


**Possible Books for Reviewing**

- Thomas, Lewis. *Lives of a Cell*
- Carson, Rachel. *Sea Around Us.*

Plus scholarly and popular journal articles

**Major Assignments:**
• **Annotated Bibliography / Review of the Literature**
  Locate, analyze, summarize, and evaluate 10 scholarly sources in an area of interest and produce an Annotated Bibliography using appropriate citation style. (6-8 pages). Should be paired with both the Shorter and Longer Articles.

• **Book Review**
  Read a selected scientific non-fiction book aimed at the general public and write a review. (3-4 pages)

• **Interview**
  Interview and write an extended article for a general audience about scientific professional on the disciplinary writing she/he does (6-8 pages).

• **Shorter Article**
  Drawing on the Annotated Bibliography, write an article for a general audience / popular journal on a topic of interest. Follow conventions for that journal. Utilize at least two graphic exhibits effectively. (1500 words)

• **Longer Article**
  Write an expanded version of the shorter article for a scholarly audience and a particular journal (2500 words). Follow conventions for that journal. Utilize at least three graphic exhibits effectively.

**Course Policies**

*Attendance is key to success in this class.* Four absences will lower your final grade by one half-letter; and each absence afterward will lower it an additional half-letter.

**Statement Regarding Students with Disabilities:**
Accommodations are collaborative efforts between students, faculty, and Services for Students with Disabilities (SSD). Students with accommodations approved through SSD are responsible for contacting the faculty member in charge of the course prior to or during the first week of the term to discuss accommodations. Students who believe they are eligible for accommodations but who have not yet obtained approval through SSD should contact SSD immediately at 737-4098.

**Link to Statement of Expectations for Student Conduct:**
[http://oregonstate.edu/admin/stucon/achon/htm](http://oregonstate.edu/admin/stucon/achon/htm)
WR 462/562 SAMPLE SKELETON SYLLABUS

Week One:
Introductions to the background and theories of science writing
Basic principles for writing lab notes, lab reports, and research articles.
Plan interview project

Week Two:
Reviews of literature, concepts and theories. Putting theories into practice by planning the Annotated Bibliography; Library visits for Information Literacy for Annotated Bibliographies

Week Three:
Review of the Literature / Annotated Bibliography Due
Peer reviews on interview articles

Week Four:
Interview article due
Considering the concept and role of book reviewing in scientific discourse; Discussing books to be reviewed

Week Five:
Planning the shorter and longer research articles

Week Six:
Peer review and conferences on shorter article

Week Seven:
Shorter articles due
Peer review on Book Reviews

Week Eight:
Book reviews due
Presentations by Grad students on Conventions;

Week Nine:
Peer review and conferences on the longer article

Week Ten:
Final Conversations; Longer Article Due