BRR 403: Thesis
Writing Intensive Course
Course Syllabus

Oregon State University, BioResource Research Interdisciplinary Sciences (BRR)
4 credits
Course Meetings: 4 hours, scheduled each term
Prerequisite: None

Instructor Contact: Kate Field (541) 737-1837
Nash Hall 354
E-Mail: Kate.Field@oregonstate.edu

BRR 403 is a 4 credit writing intensive course (WIC), for the BRR interdisciplinary program. BRR students do a required 14-credit mentored research project. The BRR undergraduate thesis contains the final written report summarizing the research project. Initial components of the thesis, WIC ungraded writing assignments, will consist of two brief ungraded written reports and a lab book/journal.

All students planning to complete and present the thesis during a particular term will meet with BRR director Field to review the thesis requirements. In subsequent meetings, students will bring completed sections of their theses for peer review.

Course Objectives:
To learn, practice, and critique effective scientific writing. Students develop writing skills that will be essential for their professional careers. These skills will improve as students respond to critical feedback, and seek new ways to make scientific information understandable to scientists and their peers.

Learning Outcomes:
Students will be able to:
• Formulate and write a research proposal
• Effectively record data and experiments so that others can understand them, and so that they can form the basis of a thesis
• Communicate science by means of a thesis, written in the format of a scientific journal article
• Practice effective, correct and appropriate writing in the area of concentration (option)
• Understand and critique scientific writing

Assessment/evaluation of student performance:
Ungraded writing assignments consist of a laboratory notebook, a research proposal, and a progress report. Each student’s Faculty Research Mentor will review these, students will be provided with comments and feedback, and students will be given a chance to improve. The grade for BRR 403 will be based on the student’s research thesis, and will be provided by the student’s research committee (faculty mentor, secondary mentor, and BRR Director). Students will receive feedback from peers on initial drafts, and from their Research Committee on the complete draft. They will be given a chance to revise before the final thesis is completed.

Schedule
<table>
<thead>
<tr>
<th>Week</th>
<th>Topic and/or activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Bring 1) thesis outline; 2) copy of an article from your chosen scientific journal. We will go through thesis requirements and schedule, and review reference programs (EndNote, Zotera)</td>
</tr>
<tr>
<td>4</td>
<td>Bring a draft of your Introduction</td>
</tr>
<tr>
<td>6</td>
<td>Bring a draft of your Materials and Methods section for peer review</td>
</tr>
<tr>
<td>8</td>
<td>Bring a draft of your Results and Discussion sections for peer review</td>
</tr>
</tbody>
</table>
Description of Projects:

**Project Proposal**
During the first term you are signed up for research credits, you will write a 2-3 page proposal that succinctly outlines your proposed research, containing:

- Introduction (why),
- Materials and Methods (how), and
- Short reference list (minimum 3-5 publications), properly formatted

To do this, you should have planning meetings with your mentor. Ask your mentor for background material to read such as research papers and grant proposals. Ask a librarian for assistance in looking for references on your research topic. You can contact a librarian by telephone or e-mail to set up an appointment, or email a brief project description to the BRR librarian, Hannah Rempel, at hannah.rempel@oregonstate.edu, or call 737-9902. Or, use the list of specialized librarians by department/program, available at: http://osulibrary.oregonstate.edu/staff/sublist.html

Submit a draft of your proposal to your mentor for suggestions and approval. When you are both satisfied with it, your mentor and secondary mentor must initial it and you must turn in a copy to the BRR office for your files.

This proposal must be completed during the first term that you sign up for research (BRR 401) credits. This writing assignment partially fulfills the WIC requirement for BRR majors.

**Laboratory Notebook**
Students will keep a laboratory notebook in the format required by the research mentor. The notebook remains the property of the research laboratory or group and stays in the lab. The notebook will provide a complete record of why experiments were initiated and how they were performed, methods, objectives, reagents, results, and conclusions, as well as keeping track of student hours. The notebook will form the basis for the thesis. It is the student’s responsibility to find out the mentor’s requirements for a notebook, data organization and storage.

**Progress Report**
About halfway through your research project, or three terms before you plan to graduate, write a progress report. This will contain a research update, description of problems encountered, and a timeline for project completion. Submit it to your research mentor for suggestions and approval. Schedule a meeting with your committee (mentor and secondary mentor and BRR director) to go through the report.

When you are satisfied with it, your mentor and secondary advisor must initial it and you must turn in a copy to the BRR office.

This report partially fulfills the WIC requirement for BRR majors.

**Thesis**
At the beginning of your last term, prepare a brief thesis outline in consultation with your mentor. Your thesis will be written in the format of a manuscript submitted to a scientific journal in your field. You and your mentor will select an appropriate journal. You will follow this format exactly, except that the Introduction and Methods sections of your thesis may be expanded to provide more detail than what is found in a typical journal article. Your thesis should be about 25 double-spaced text pages, plus 6-8 tables and figures. At the discretion of the mentor, additional material may be added in an appendix. Examples of BRR Theses can be found in the Library Scholars Archive (http://ir.library.oregonstate.edu/xmlui/handle/1957/456)

The BRR director will schedule several (required) BRR403 group meetings with students in their final terms, to work on their theses. When you come to the first meeting, you will bring an article as an example of your chosen journal.

The BRR advisor will help you schedule your final seminar/thesis defense, to be held no later than Thursday of dead week. You should give drafts of each thesis section to your mentor as you complete
them. Submit a complete draft copy of your thesis to your faculty mentor no later than three weeks prior to final seminar/defense date. Your advisor will meet with you to give you back an edited draft two weeks before your final defense.

Submit a revised copy of the thesis to the faculty mentor, secondary advisor, and BRR director no later than one week prior to your final seminar/defense date. This copy should contain the Thesis Title Page and Signatures Page (see BRR web page), which you and your committee will sign when the final thesis is approved.

Your committee will give you suggestions and editorial changes to the thesis at your defense. Using these, edit and submit a final copy of the thesis to your faculty mentor and BRR director. Obtain signatures from your committee on the signatures page and give a signed final copy to the advisor by noon of the Monday after finals week, when final grades are due to the registrar. BRR also requires an electronic copy, for the library.

NOTE THAT THE HONORS COLLEGE HAS DIFFERENT REQUIREMENTS FOR THE THESIS COMMITTEE, TITLE PAGE FORMAT, AND DEADLINES (deadlines are earlier)! YOU WILL HAVE TO HAND IN A BOUND COPY OF YOUR THESIS TO HONORS COLLEGE.

IT IS YOUR RESPONSIBILITY TO FIND OUT DETAILS OF THESE REQUIREMENTS.
http://oregonstate.edu/dept/honors/current/thesis

Students with Disabilities: Accommodations are collaborative efforts between students, faculty and Disability Access Services (DAS). Students with accommodations approved through DAS 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 DAS should contact DAS immediately at 737-4098.

Rules on Civility and Honesty:
The BioResource Research Interdisciplinary Program follows the university rules on civility and honesty. Cheating or plagiarism by students is subject to the disciplinary process outlined in the Student Conduct Regulations. Students are expected to be honest and ethical in their academic work. Academic dishonesty is defined as an intentional act of deception in one of the following areas:

* cheating- use or attempted use of unauthorized materials, information or study aids
* fabrication- falsification or invention of any information
* assisting- helping another commit an act of academic dishonesty
* tampering- altering or interfering with evaluation instruments and documents
* plagiarism- representing the words or ideas of another person as one's own

Behaviors disruptive to the learning environment will not be tolerated and will be referred to the Office of Student Conduct for disciplinary action.

“The goal of Oregon State University is to provide students with the knowledge, skill and wisdom they need to contribute to society. Our rules are formulated to guarantee each student's freedom to learn and to protect the fundamental rights of others. People must treat each other with dignity and respect in order for scholarship to thrive. Behaviors that are disruptive to teaching and learning will not be tolerated, and will be referred to the Student Conduct Program for disciplinary action. Behaviors that create a hostile, offensive or intimidating environment based on gender, race, ethnicity, color, religion, age, disability, marital status or sexual orientation will be referred to the Affirmative Action Office.”

Link to Statement of Expectations for Student Conduct, i.e., cheating policies:
http://oregonstate.edu/admin/stucon/achon.htm