Term Information

Autumn 2019

General Information

Course Bulletin Listing/Subject Area	Evol, Ecology & Organismal Bio
Fiscal Unit/Academic Org	Evolution, Ecology & Org Bio - D0390
College/Academic Group	Arts and Sciences
Level/Career	Graduate
Course Number/Catalog	6630
Course Title	Scientific Writing in Evolution & Ecology: Proposals
Transcript Abbreviation	Evol Ecol Write II
Course Description	This graduate-level course focuses on improving the scientific writing ability of students. This course will focus specifically on writing scientific proposals. During the course, students will learn how to approach the proposal writing process, practice writing, and learn to effectively critique their own writing and that of others.
Semester Credit Hours/Units	Fixed: 1.5

Offering Information

Length Of Course	7 Week
Flexibly Scheduled Course	Never
Does any section of this course have a distance education component?	No
Grading Basis	Satisfactory/Unsatisfactory
Repeatable	No
Course Components	Lecture
Grade Roster Component	Lecture
Credit Available by Exam	No
Admission Condition Course	No
Off Campus	Never
Campus of Offering	Columbus

Prerequisites and Exclusions

Prerequisites/Corequisites
Exclusions
Electronically Enforced

No

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code Subsidy Level Intended Rank 26.9999 Doctoral Course Masters, Doctoral

Requirement/Elective Designation

Required for this unit's degrees, majors, and/or minors

Course Details				
Course goals or learning objectives/outcomes	 Students will understand how to craft compelling scientific proposals. 			
objectives/outcomes	• Students will grasp the mechanics of technical science writing.			
	• Students will understand the value of peer-reviews in technical science writing.			
Content Topic List	Rationale & Objectives			
	• Expected Significance			
	Research Plan, Long-term Goals, Background, Preliminary & Related Work			
	Broader Impacts			
	Title & Project Summary			
	• The review process			
Sought Concurrence	No			
Attachments	• EEOB 6630 Writing Science Proposals.pdf: updated syllabus			
Attachiments	(Syllabus. Owner: Hamilton,Ian M)			
Comments	• We have made the following changes in response to feedback from the panel:			
	1) Clarified that there are 2 in class activities and 1 out of class activity. The out of class activity (proposal writing) is			
	described in more detail.			
	2) The discussion of grading has been revised to reflect that the course is S/U. For the grade table, "Week" has			
	been replaced with assignment.			
	3) References to older course numbers (8896) have been removed			
	4) More information on the final proposal assignment is now presented in General Course Format and on the Class			
	Schedule.			
	5) Both this course and 6620 are required for graduate students in EEOB. However, they are not required to take			
	them in a particular order. Therefore, reference to this being the second of a two part course (and similar language			
	in the description of 6620) has been removed.			
	These changes can be found in the updated syllabus uploaded with this submission. (by Hamilton, Ian M on 11/01/2018 02:38			
	PM)			
	• See 10-30-18 feedback email. (by Vankeerbergen, Bernadette Chantal on 10/30/2018 03:34 PM)			

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Hamilton, Ian M	10/10/2018 12:21 PM	Submitted for Approval
Approved	Hamilton, Ian M	10/10/2018 12:21 PM	Unit Approval
Approved	Haddad, Deborah Moore	10/10/2018 01:02 PM	College Approval
Revision Requested	Vankeerbergen,Bernadet te Chantal	10/30/2018 03:34 PM	ASCCAO Approval
Submitted	Hamilton, Ian M	11/01/2018 02:38 PM	Submitted for Approval
Approved	Hamilton, Ian M	11/01/2018 02:51 PM	Unit Approval
Approved	Haddad, Deborah Moore	11/01/2018 04:06 PM	College Approval
Pending Approval	Nolen,Dawn Vankeerbergen,Bernadet te Chantal Oldroyd,Shelby Quinn Hanlin,Deborah Kay Jenkins,Mary Ellen Bigler	11/01/2018 04:06 PM	ASCCAO Approval

EEOB 6630 Scientific Writing in Ecology and Evolution: Proposals

Autumn Semester 2019 (2ND seven weeks)

Instructor:

Dr. Ian Hamilton, Department of EEOB, Department of Mathematics, 390 Aronoff Laboratory, 318 W 12th Ave; Email: <u>hamilton.598@osu.edu</u>

Meeting Time & Location:

Mondays 1:00-3:00, Oct. 15 – Dec. 3 Location: 104 Aronoff Laboratory

Course Overview:

This graduate-level course will focus on improving the scientific writing ability of students. This course will focus specifically on writing scientific proposals. During the course, students will learn how to approach the proposal writing process, practice writing, and learn to effectively critique their own writing and that of others.

Course Goals & Expected Learning Outcomes:

- 1) Students will understand how to craft compelling scientific proposals.
 - a) Students will be able to explain the elements of well-designed scientific proposals.
 - b) Students will be able to identify the strengths and weakness of scientific proposals.
 - c) Students will be able to decide what content to include in their writing.
 - d) Students will improve in their ability to write scientific proposals.
- 2) Students will grasp the mechanics of technical science writing.
 - a) Students will be able effectively organize their writing in scientific proposals.
 - b) Students will be able to identify problems in the mechanics of writing.
 - c) Students will be able to craft text that is understandable to both experts and non-experts.
- 3) Students will understand the value of peer-reviews in technical science writing.
 - a) Students will be able to properly articulate to a peer how writing can be improved to make it more compelling and effective.
 - b) Students will be able to use reviewer feedback to improve their own writing.
 - c) Students will learn how to conduct and structure a formal peer review.

Required Text:

Russell, S.W., and D.C. Morrison. 2017. The Grant Application Writer's Workbook: National Science Foundation – FastLane Version. (<u>http://www.grantcentral.com/workbooks/national-science-foundation/</u>).

In-Class and Out-of-Class Assignments:

I am expecting students to read, write, and review proposals outside of class each week, and submit their work on Carmen. While I recognize that you are all busy, DO NOT COME TO CLASS UNPREPARED. Taking the time to do the required homework will greatly improve your writing over just reading alone, help your fellow students, and hone your abilities as a reviewer.

Attendance:

More than one <u>unexcused</u> absence will result in an unsatisfactory grade. If you will need to miss a class, please let me know ASAP. This information will help me plan schedule discussion leaders and organize peer groups. I also can then work with you to devise a way to make up the missed work.

Materials Posted on Carmen:

Materials for this course will be posted on the EEOB 6630 Carmen site. At this site, you will find this syllabus, as well as all assignments and required readings. I also will post supplemental materials and handouts at this site, and expect you to upload our writing and peer reviews to this site on a weekly basis. Please check the Carmen website frequently.

<u>Also, be sure to check your official OSU email daily; all correspondence will be to this OSU account.</u> I will not respond to non OSU emails, owing to OSU policy rules.

General Course Format:

We will meet once per week for 2 hours. During this time, we will undertake two primary activities:

- A) *Leading discussion:* Each week a pair of students will introduce and discuss with the class an aspect of the writing process, using Russell and Morrison's text as a guide. This discussion each week should occur in a small-group setting at the outset (3-4 groups with 1 student "leader" per group), followed by a whole-class discussion.
- B) Peer review: Working in groups of three, students will review each other's writing. Students will review the writing of <u>two</u> students prior to class and use class time to communicate their thoughts to their peers. I will help form the groups to ensure they consist of a mixture of experienced and inexperienced writers, or split by the type of proposal being written (e.g., NSF GRFP vs. traditional NSF). After this small-group discussion, we will come back as a large group and share any interesting or important insights.

In addition to the in-class activities outlined above, the course includes the following out-of-class activity:

C) Proposal: Each week, each student will work on writing a proposal. Students will work on the same proposal for the duration of the course. If possible, this should be your dissertation or thesis proposal, although other proposals are acceptable (e.g., a postdoctoral fellowship proposal). Proposals should be prepared according the most recent version of the National Science Foundation Proposal and Award Policies & Procedures Guide (PAPPG Section II.C.2.c – Section II.C.2.e): <u>https://www.nsf.gov/publications/pub_summ.jsp?ods_key=pappg</u>

You will submit various drafts of the proposal over the duration of the course (see **Class Schedule**). I do not expect you to have a complete draft at the start of the course. For your first draft, focus on developing an outline of your proposal.

The final proposal submitted at the end of the course is expected to be a complete proposal that includes a project summary, overview & objectives, description of intellectual merit, research plan, discussion of broader impacts and references.

All students are expected to write each week and <u>submit their writing</u> for peer review on the course's Carmen site <u>no later than 8 AM on the Friday before class</u>. This will allow the peer reviewers Friday and the weekend to review the writing; a <u>critique</u> of the work (i.e., edited electronic version w/ comments) should be posted the course's Carmen site <u>before the start of class on that Monday</u>. My suggestion is that no more than 30 minutes should be spent reviewing one person's writing (i.e., both peer reviews should take less than an hour, in total).

On occasion, I am likely to provide additional materials (e.g., writing, editable text) to the student groups, or co-opt some of the class time, to facilitate the learning process.

Anticipated Class Timeline:

The expected format and timeline for a typical class (weeks 2-7) is below. I will modify this as needed.

- 1. Discuss writing topic (~55 min)
 - a. Topic leaders facilitate small-group discussions (15 min)
 - b. Topic leaders facilitate a whole-class follow-up discussion (40 min)
- 2. Break (5 min)
- 3. Discuss Peer Reviews (~60 min)
 - a. Students discuss their peer reviews in small groups (45 min, 15 min per person)
 - b. Large-group discussion of peer reviews (~15 min)

Grading:

This course is graded satisfactory/unsatisfactory. The surest way to succeed is to attend class and put effort into the homework assignments (readings, writing, and reviews). As a means to motivate you to do your homework—because it will benefit you in the long-run—I created point-based grading system. I do not plan to grade your work; however, I will look at your effort, to ensure that you put it in. For a satisfactory grade, you must complete a final proposal and the final peer review and accumulate 266 of the 380 points. The breakdown of points is as follows:

Assignment	#	Total Points
Lead Discussion Topic (1 week)	1	25
Weekly (Focused) Proposal Writing	5	75
Final (Full) Proposal	1	50
Weekly (Focused) Peer Reviews	5	75
Final (Full) Peer Review	1	50
Class Attendance/Participation	7	105
Total Points		380

Academic Misconduct

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct <u>http://studentlife.osu.edu/csc/</u>.

Disability Services

The University strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After

registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.

Mental Health

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614--292--5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on call counselor when CCS is closed at 614--292--5766 and 24 hour emergency help is also available through the 24/7 National Suicide Prevention Hotline at 1--800--273-TALK or at suicidepreventionlifeline.org.

Sexual Misconduct

Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories (e.g., race). If you or someone you know has been sexually harassed or assaulted, you may find the appropriate resources at http://titleix.osu.edu or by contacting the Ohio State Title IX Coordinator, Kellie Brennan, at <u>titleix@osu.edu</u>.

Diversity

The Ohio State University affirms the importance and value of diversity in the student body. Our programs and curricula reflect our multicultural society and global economy and seek to provide opportunities for students to learn more about persons who are different from them. We are committed to maintaining a community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among each member of our community; and encourages each individual to strive to reach his or her own potential. Discrimination against any individual based upon protected status, which is defined as age, color, disability, gender identity or expression, national origin, race, religion, sex, sexual orientation, or veteran status, is prohibited.

TENTATIVE CLASS SCHEDULE:

Week	Date	Topics & Activities	Reading/Writing (Submit peer review on Carmen before class; submit proposal drafts by 8:00 am on date listed)	Leader(s)
1	Oct 15	 Course Introduction Student introductions/Proposal Type Syllabus/scheduling/Carmen Mock peer review decision Topic 1: NSF Funding Process & Writing for reviewers 	R & M: Chap. 1-3 & 6 Work on your proposal – due Friday, Oct 19	Ian Hamilton
2	Oct 22	Topic 2: Overview & Objectives (O&O) Peer Review Discussions: Merit Review Criteria	R & M: Chap. 7-8 Skim through all proposals Discussion leaders choose 3 to focus on Peer review (Merit Review Criteria)	To be determined
		Proposal text (O&O sections) – due Friday Oct 26	Everyone	
3	Oct 29	Topic 3: Expected Significance • Critique/edit examples	R & M: Chap. 9 Assigned Proposals	To be determined
	Peer Review Discussions: Overview & Objectives	Peer review (O&O sections) Proposal text (Intellectual merit section) -due Friday, Nov 2	Everyone	
4	Nov 5	Topic 4: Research Plan, Long-term Goals, Background, Preliminary & Related Work sections	R & M: Chap. 11-14 Assigned Proposals	To be determined Everyone
	Peer Review Discussions: Intellectual Merit	Peer review (Intellectual merit section)		
5	Nov 12	No class (Veterans Day)	Proposal text (Research Plan, ≥ 1 aim and BI section) –due Friday, Nov 16	

		Topic 5: Broader Impacts (BI)	R & M: Chap. 15 Assigned Proposals	To be determined
6 Nov 19	Peer Review Discussions: Research Plan, Long-term Goals, Background, Preliminary & Related Work section	Peer review (focus on Res. Plan)	Everyone	
		Topic 6: Title & Project Summary • Critique/edit examples	R & M: Chap. 22-23 Assigned Proposals	To be determined
7 Nov 26	Peer Review Discussions: Broader impacts section	Peer review (focus on BI Section) Proposal text (Project Summary) – due Friday, Nov 30	Everyone Everyone	
8	8 Dec 3	Topic 7: Review Process Mock Review Panel	NSF Panel Process Assigned Proposals	Ian Hamilton
		Peer Review Discussions: Title & Project Summary	Peer review (Project Summary) Submit final proposal by Friday, Dec 7	Everyone
	Dec 10	No Class Meeting	Submit final peer review	Everyone