

Term Information

Effective Term 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 6620
Course Title Scientific Writing in Evolution & Ecology: Manuscripts
Transcript Abbreviation Evol Ecol Write I
Course Description This graduate-level course is the first of a two-part set that will focus on improving the scientific writing ability of students. This course will focus specifically on writing scientific manuscripts. During the course, students will learn how to approach the 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 None
Exclusions
Electronically Enforced No

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code 26.9999
Subsidy Level Doctoral Course
Intended Rank 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 the writing process and why writing is important in science.
- Students will understand how to craft compelling scientific papers.
- Students will grasp the mechanics of technical science writing.
- Students will understand the value of peer-reviews technical science writing.

Content Topic List

- Manuscript structure
- Openings, challenges, action, resolution
- Internal structure, paragraphs and sentences
- Creating flow

Sought Concurrence

No

Attachments

- EEOB 6620 Writing Science Manuscripts.docx

(Syllabus. Owner: Hamilton,Ian M)

Comments

Workflow Information

| Status | User(s) | Date/Time | Step |
|------------------|---|---------------------|------------------------|
| Submitted | Hamilton,Ian M | 10/10/2018 12:20 PM | Submitted for Approval |
| Approved | Hamilton,Ian M | 10/10/2018 12:21 PM | Unit Approval |
| Approved | Haddad,Deborah Moore | 10/10/2018 01:03 PM | College Approval |
| Pending Approval | Nolen,Dawn Vankeerbergen,Bernadette Chantal Oldroyd,Shelby Quinn Hanlin,Deborah Kay Jenkins,Mary Ellen Bigler | 10/10/2018 01:03 PM | ASCCAO Approval |

EEOB 6620
Scientific Writing in Ecology and Evolution: Manuscripts
Autumn Semester 2019 (1st seven weeks)

Instructor:

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

Meeting Time & Location:

Mondays 1:00-3:00, Aug. 28 – Oct. 8
Location: 104 Aronoff Laboratory

Course Overview:

This graduate-level course is the first of a two-part set that will focus on improving the scientific writing ability of students. This course will focus specifically on writing scientific manuscripts. During the course, students will learn how to approach the 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 the writing process and why writing is important in science.
 - a) Students will be able to explain why time and effort is needed in the writing process.
 - b) Students will be alert to methods to write efficiently and effectively.
 - c) Students will be able to explain how the publication process has changed with time.
 - d) Students will be able to differentiate among different types of technical science writing.
- 2) Students will understand how to craft compelling scientific papers.
 - a) Students will be able to explain the elements of well-designed scientific papers.
 - b) Students will be able to identify the strengths and weakness of scientific papers.
 - c) Students will be able to decide what content to include in their writing.
 - d) Students will improve in their ability to write scientific papers.
- 3) Students will grasp the mechanics of technical science writing.
 - a) Students will be able effectively organize their writing in scientific papers.
 - b) Students will be able to identify problems in the mechanics of writing (e.g., syntax, word choice, grammar, verbosity, flow).
 - c) Students will be able to craft text that is understandable to both experts and the lay reader.
- 4) Students will understand the value of peer-reviews 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:

Schimel, Joshua. 2012. Writing Science: How to Write Papers That Get Cited and Proposals That Get Funded. Oxford University Press. (ISBN: 9780199760244 for paperback).

In-Class and Out-of-Class Assignments:

I am expecting students to read, write, and review papers 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 *unexcused* 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 8896 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.

Also, be sure to check your official OSU email daily; all correspondence will be to this OSU account. 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 three primary activities:

- A) Each week a pair of students will introduce and discuss with the class an aspect of the writing process, using Schimel'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. This discussion will focus on four published scientific papers that I provide—the same four each week (Costanza et al. 1997, Nowlin & Drenner 2000, Levine et al. 2003, and McCormick 2006)—within the context of the topic discussed in Schimel.
- B) Working in groups of 3, students will review each other's writing. Students will review the writing of **two** 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. After this small-group discussion, we will come back as a large group and share any interesting or important insights.

All students are expected to write each week and submit their writing for peer review on the course's Carmen site no later than 8 AM on the Friday before class. This will allow the peer reviewers Friday and the weekend to review the writing; a critique of the work (i.e., edited electronic version w/ comments) should be posted the course's Carmen site before the start of class on that Monday. 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 4-7) is below. I will modify this as needed.

1. Discuss writing topic (~60 min)
 - a. Topic leaders facilitate small-group discussions (20 min)
 - b. Topic leaders summarize their small-group discussions (10 min; 3-5 min per group)
 - c. Topic leaders facilitate a whole-class follow-up discussion (25 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 a pass-fail course that I want you all to pass. The surest way to make this happen 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 are put it in. To pass the class, you must, accumulate 264 of the 355 points. The breakdown of points is as follows:

| Week | # | Total Points |
|--------------------------------|----------|---------------------|
| Lead Discussion Topic (1 week) | 1 | 25 |
| Weekly (Focused) MS Writing | 5 | 75 |
| Final (Full) MS | 1 | 25 |
| Weekly (Focused) Peer Reviews | 5 | 75 |
| Final (Full) Peer Review | 1 | 25 |
| Class Attendance | 7 | 105 |
| Total Points | | 330 |

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 <http://studentlife.osu.edu/csc/>.

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 titleix@osu.edu.

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.

CLASS SCHEDULE:

| Week | Date | Topics & Activities | Reading/Writing (Submit on Carmen before class; revised MS must be submitted the Friday before class) | Leaders |
|-------------|-------------|---|---|---------------------|
| 1 | Aug 28 | <p>Course Introduction</p> <ul style="list-style-type: none"> • Student introductions • Syllabus/scheduling/Carmen <p>Publication Process Discussion</p> <p>Topic 1 Stories</p> <ul style="list-style-type: none"> • Why writing matters & the writing process • Storytelling in science writing • SUCCESSful stories | <p>Statzner & Resh (2010) Schafer et al. (2011)</p> <p>Schimel: Chapters 1-3 Costanza et al. (1997) Nowlin & Drenner (2000) Levine et al. (2003) McCormick (2006)</p> | Ian Hamilton |
| 2 | Sept 3 | <p>Topic 2 Paper structure</p> <ul style="list-style-type: none"> • How to structure a paper (“funnel” shape) • Structural differences among paper types • Exercise 5.3 (p. 49) <p>Peer Review Discussions</p> <ul style="list-style-type: none"> • Focus on the story | <p>Schimel: Chapters 4-6 & 4 focal papers</p> <p>Submit focused peer review</p> | TBA Everyone |
| 3 | Sep 10 | <p>Topic 3 Content</p> <ul style="list-style-type: none"> • Content to include in papers • Challenge, action & resolution • Content differences among paper types <p>Peer Review Discussions</p> <ul style="list-style-type: none"> • Focus on its structure | <p>Schimel 7-9 & 4 focal papers</p> <p>Submit revised MS Submit focused peer review</p> | TBA Everyone |
| 4 | Sep 17 | <p>Topic 4 Internal structure</p> <ul style="list-style-type: none"> • Internal structure of papers | Schimel 10-12 & 4 focal papers | TBA |

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|---|---------|---|---|---------------------|
| | | <ul style="list-style-type: none"> Organizing paragraphs & sentences Exercises 11.3 (p.111), 12.3 & 12.4 (pp. 122-123) Peer Review Discussions <ul style="list-style-type: none"> Focus on content | <p align="center">Submit revised MS Submit focused peer review</p> | Everyone |
| 5 | Sep 24 | Topic 5 Flow <ul style="list-style-type: none"> Paper flow Energizing writing Exercises 13.3 (p.132) & 14.3 (p. 144) Peer Review Discussions <ul style="list-style-type: none"> Focus on paragraph and sentence structure | Schimel 13-14 & 4 focal papers <p align="center">Submit revised MS Submit focused peer review</p> | TBA Everyone |
| 6 | Oct 1 | Topic 6 Mechanics <ul style="list-style-type: none"> Mechanics of writing (syntax, brevity) Limitations in writing Exercises 15.3 (p. 157) & 16.2 (p. 173) Peer Review Discussions <ul style="list-style-type: none"> Focus on flow and energy | Schimel 15, 16, 17 & 4 focal papers <p align="center">Submit revised MS Submit focused peer review</p> | TBA Everyone |
| 7 | Oct 8 | Topic 7 Tone <ul style="list-style-type: none"> Tone Putting it all together / Limitations in writing Exercise 20.1-20.3 (p. 203) Peer Review Discussions <ul style="list-style-type: none"> Focus on tone | Schimel 18, 19, 20 <p align="center">Submit revised MS Submit focused peer review</p> | TBA Everyone |
| 8 | Oct. 10 | | <p align="center">Submit full peer review (on Carmen)</p> | Everyone |