BIO_SC 3260W summersg: Invertebrate Zoology - Writing Intensive

History
1. Oct 11, 2016 by Gerald Summers (SummersG)
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Viewing: BIO_SC 3260W summersg : Invertebrate Zoology - Writing Intensive
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Proposal Type
I am proposing
Writing Intensive

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Term for Proposal

Semester:
Spring 2019

Course Catalog Information

Academic Unit:
A&S

Subject area:
Biological Sciences (BIO_SC)

Course number:
3260W

Credit hours:
4

Expected enrollment:
30

Full course title:
Invertebrate Zoology - Writing Intensive
Catalog description:
Structure, ecology and phylogeny of the invertebrate phyla. Includes lab.

General education:

Components:
Lecture/Standard with Laboratory

Grading option:
A-F (allow student to choose S/U option)

Prerequisites:
BIO_SC 1100 or BIO_SC 1500.

Corequisites:

Prerequisites or Corequisites:

Recommended:
Junior Standing.

Cross-listed courses:

Instructor Information

Instructor User ID:
summersg

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Department
Biological Science

Faculty rank:
Tenured Associate Professor

Campus address:
110 Lefevre
Attendance at Campus Writing Program workshop:

Indicate below if additional instructors are planned, but specific individuals have not yet been chosen. Check all that apply

Type of Additional instructors:

Writing Intensive Course Information

WI course overview:
This course is a survey of the Animal Kingdom, including detail on the morphology, physiology, and ecology characterizing major taxa. This information provides the basis for a comparative study of animal diversity and reveals several principles of systematics. The laboratory emphasizes study of morphology and taxonomy.

What changes have you made to your course since its last offering?
In previous terms, I assigned an invertebrate to each student and asked them to Google it to see what kind of (mis)information is on the Web about these animals. This used to be a somewhat interesting assignment, but is now pretty uninspiring. I will replace that work with an assignment about a newly-discovered invertebrate species. The focus will be a real animal, but the paper will be written as though it were intended for a newspaper or general interest magazine.

Delivery mode (select one):

Face-to-face

Previous WI enrollment:

61

Expected WI enrollment

60

Is this course required for students majoring in this area?
No

Is this course open to Non-Majors?
No

Are WI funds needed to support any of the following? (check all that apply)

Checkbox Group

WI funding will be needed to support Teaching Assistants or other teaching staff.

Large Enrollment Courses:

Explain the class structure:

2 50-minute lectures per week + 2 2-hour laboratory sessions per week

How do you plan to monitor your students’ performance?

With writing assignments and examinations, there is some assigned work every week of the term. Instructor marks all student writing.
How will you ensure that GTAs grade and mark as you would.
GTAs grade laboratory practical examinations, only.

**Writing Intensive Assignments**

I count the lengths of my assignments by:
Words

**Assignment title:**
Assignment 1

**Purpose and process of the assignment:**
1. 1-sentence summary, 2 points During the first laboratory session, students read a paragraph from a popular science text and write a 1-sentence summary. This is followed by class discussions on representative samples, with emphasis on clarity and how well the sentence reflects the source material.

**Length of assignment per student:**

First Draft # words:
25

First Draft Evaluator:
Instructor

Revised Draft(s) #words:

Revision Evaluator

Total length of assignment:
25

**Assignment title:**
Assignment 2

**Purpose and process of the assignment:**
2. Letter home, 12 points, 660 words. Students will write a letter to Mom or Dad or a friend at home and describe the first day's lecture. Since the reader of the letter is presumably not a college biology major, students must take care to accurately summarize the lecture and to define the technical terms that they use.

**Length of assignment per student:**

First Draft # words:
660

First Draft Evaluator:
Instructor
Assignment title:
Assignment 3

Purpose and process of the assignment:
3. Huxley's "Fundamental Law of Nature," 12 points, 660 words. Students read an excerpt from a public lecture by T. H. Huxley, a 19th-century champion of the study of animal biology in public education. This famous essay deals with the lobster, but reveals important principles of comparative biology that students must discover and describe in modern language.

Length of assignment per student:

First Draft # words:
660
First Draft Evaluator:
Instructor

Revised Draft(s) #words:
Revision Evaluator

Total length of assignment:
660

Assignment title:
Assignment 4

Purpose and process of the assignment:
4. Worksheet on writing conventions in systematic biology, 20 points This is a take-home exercise which includes an introduction to the proper usage of taxonomic names, plus a brief review of select grammatical issues that have been a problem with students in this class in the past (e.g., active voice vs passive voice, wordiness, subject-verb agreement).

Length of assignment per student:

First Draft # words:
25
First Draft Evaluator:
Instructor

Revised Draft(s) #words:
Revision Evaluator

Total length of assignment:
Assignment title:
Assignment 5

Purpose and process of the assignment:
5. Using a set of propositions to reach a conclusion, 21 points, 660 words. Subject to peer review and revision, 790 words Students are given a set of 10 propositions about coral and photosynthetic algae known as zooxanthellae. These facts provide the basis for a 2-page essay on the relationship between coral and zooxanthellae. Students have studied coral in lecture, so their task is to order the 10 facts in a way that makes sense, connect the facts with appropriate transitions based on their own knowledge and background reading, and arrive at a conclusion about the nature of the relationship. This paper is subject to peer review in a laboratory session and is then revised and re-submitted.

Length of assignment per student:
First Draft # words:
660
First Draft Evaluator:
Peer

Revised Draft(s) #words:
900
Revision Evaluator
Instructor

Total length of assignment:
1560

Assignment title:
Assignment 6

Purpose and process of the assignment:
6. Principles of ethical writing in science, 10 points. This is an in-class exercise in which students are reminded of the importance of properly citing the work of others. The exercise emphasizes both plagiarism and the need to recognize the source of ideas and conclusions when writing about scientific work.

Length of assignment per student:
First Draft # words:
25
First Draft Evaluator:
Instructor

Revised Draft(s) #words:
Revision Evaluator

Total length of assignment:
Assignment title:
Assignment 7

Purpose and process of the assignment:
7. Writing an abstract, 12 points, 330 words. Following a short lesson on the key features of an abstract of a scientific paper, students read a relatively short paper from a paper in Science magazine and write an abstract for the paper.

Length of assignment per student:

First Draft # words:
330
First Draft Evaluator:
Instructor

Revised Draft(s) #words:
Revision Evaluator

Total length of assignment:
330

Assignment title:
Assignment 8

Purpose and process of the assignment:
8. Interpreting graphs and tables in scientific papers, 15 points, 660 words. This is a take-home exercise which requires students to briefly describe the information in a figure from a scientific paper. In particular, students must indicate what significant detail they can detect simply by examining the caption and form of the figure. Then, they are asked what significant piece of information is not apparent from an examination of the figure. This exercise emphasizes identification of results rather than interpretation of the results. A second, shorter exercise asks students to provide the text to summarize a table of numerical data.

Length of assignment per student:

First Draft # words:
660
First Draft Evaluator:
Instructor

Revised Draft(s) #words:
Revision Evaluator
Instructor

Total length of assignment:
660
Assignment title:
Assignment 9

Purpose and process of the assignment:
9. Summarizing a recent paper on an invertebrate, 18 points, 660 words, Subject to revision, 790 words After students have completed the previous Exercises 7-8, they are ready to read and summarize a recent paper. They choose from a list of papers published on an invertebrate within the recent past. The papers include organisms that have been discussed in class, so they are familiar to students. All papers are available on-line at the Ellis Library home page. Students are directed to summarize the paper, taking care to note the hypotheses and a brief description of the experimental design used to test the hypotheses. They must summarize the principal results and review the author’s conclusions from these results. This paper is submitted for review (660 words) and returned for revision (790 words).

Length of assignment per student:

First Draft #words:
660
First Draft Evaluator:
Instructor

Revised Draft(s) #words:
900
Revision Evaluator
Instructor

Total length of assignment:
1560

Assignment title:
Assignment 10

Purpose and process of the assignment:
10. Critical review of a controversial topic, 18 points, 660 words, Subject to revision, 790 words Echinoderms have connective tissue that can change from a rigid mass to a plastic and pliable semi-solid substance. The selective advantages of this feature have been identified, but the mechanism by which the tissue changes its form is subject to some dispute. Students will read a recent experimental paper testing a specific hypothesis for the control of tissue mutability. In the summary of the paper, they will either defend or attack the author’s conclusions on the basis of information in the paper or in additional reading that they have done on the subject. This paper is submitted for review and returned for revision.

Length of assignment per student:

First Draft #words:
660
First Draft Evaluator:
Instructor

Revised Draft(s) #words:
900
Revision Evaluator
Instructor
Assignment title:
Assignment 11

Purpose and process of the assignment:
11. How reliable are Web resources? 10 points, 330 words In this exercise, students research Web resources on a specific invertebrate. Animals are assigned by random drawing and include species that have been vetted for suitability for this exercise. Students must locate resources from the non-scientific and non-academic realm and provide a summary that includes two components. First, they must provide as much taxonomic detail as can be determined from the source. Typically, this includes phylum and class, but often includes subordinate taxa. Then, they must summarize the content of the Web site and identify any errors or misconceptions. This exercise is intended to develop a healthy sense of skepticism when viewing on-line sources of information.

Length of assignment per student:

First Draft # words:
330
First Draft Evaluator:
Instructor

Revised Draft(s) #words:
Revision Evaluator

Total length of assignment:
330

Total pages for all assignments:

First drafts:
Total # of pages:
14.23

Revisions:
Total # of pages:
8.18

Total # of pages for all assignments:
22.41

Additional comments regarding assignments:
USE OF REVISION IN ASSIGNMENTS Peers evaluate the first draft of Assignment #5; the instructor evaluates the first drafts of Assignments #9 and #10. Instructor assigns grades to all work.
Writing Intensive Teaching

Method for teaching revision:
Instructor provided feedback
Other
Peer review

Other method for teaching revision:
Peer review provided for Assignment #5, following a brief, in-class discussion of how to provide useful feedback to authors. Students are marked on the feedback they provide in the peer review in order to minimize superficial or unhelpful reviews. Revision on Assignments #9 and #10 involve prompts provided by the instructor, focusing on completeness and clarity: did students meet assignment objectives? did they clearly express their thoughts? Papers are not line-edited, but students with problems in grammar or spelling receive direction to attend to these errors.

If your writing assignments include group writing, please explain how individual work is assessed:

Explain briefly the nature of the assignment(s) which address(es) a question for which there is more than one acceptable interpretation, explanation, analysis, or evaluation:
Assignment #10 (described above and copied here) gives the best example of fostering critical thinking through offering opportunities for students to interpret information. “10. Critical review of a controversial topic, 18 points, 500 words, Subject to revision, 750 words Echinoderms have connective tissue that can change from a rigid mass to a plastic and pliable semi-solid substance. The selective advantages of this feature have been identified, but the mechanism by which the tissue changes its form is subject to some dispute. Students will read a recent experimental paper testing a specific hypothesis for the control of tissue mutability. In the summary of the paper, they will either defend or attack the author’s conclusions on the basis of information in the paper or in additional reading that they have done on the subject. This paper is submitted for review and returned for revision.”

Explain how the writing is distributed throughout the semester:
#1 - due in first lab session #2 - due in first lecture of second week #3 - due in second lecture of second week #4 - due at end of second week #5 - due in first lecture of third week; peer review occurs in second lab of this week; revision due in first lecture of following week. 5th and 6th week taken up by examinations #6 - completed in first laboratory of 7th week #7 - due in first lecture of 8th week #8 - due in first lecture of 9th week. 10th and 11th weeks taken up by examinations #9 - due in first lecture of 12th week; revision due in first lecture of following week #10 - due in first lecture of 14th week; revision due in first lecture of following week #11 -- due on last day of semester

Percent of course grade determined by writing-intensive assignments?
33%

Explain how the remaining percent of course grade is determined:
3 lecture examinations and 4 laboratory practical examinations; minor contribution from lab work (dissections and cladogram construction)

Estimated number of TAs or graders:
2

Explain how you plan to select and train them and what their role in the course will be:
TAs do not mark writing assignments; however, support is still needed as they assume lab and administrative duties that were formerly done by the instructor.

Course Syllabus

Upload Writing Course Syllabus (Optional)
Attach Syllabus

Administrative Information

CWP Sub-Committee:
Natural and Applied Sciences

CWP Notes:

Correspondence with Instructor:

Acknowledgement

I have read and reviewed the updated proposal

Additional Comments

Additional Comments:

Reviewer Comments

Patricia Luckenotte (luckenottep) (Thu, 16 Aug 2018 14:12:57 GMT): BIO_SC 3260W, 01 and labs 01A-01D are flagged Writing Intensive for Spring 2019

Key: 65