

## WRITING ACROSS THE CURRICULUM/BIOLOGY DEPARTMENT

### I. Expectations for Writing

Graduates of the Biology program are most likely to employ their writing skills in preparing the results of their research for publication, in preparation of grant proposals, or of course in writing papers for graduate school classes.

Our primary criteria for writing are as follows:

- Writing should convey information clearly and accurately.
- Technical terminology should be used accurately and appropriately.
- References must be acknowledged.
- Any illustrations included should be discussed in the text. If not original, they must be appropriately acknowledged.
- Writing should be edited for spelling and grammar.

### II. Writing Classes

Note: Bio 2990, 3980, 4010, and 4440 (italicized below) are not required; students must take either Botany or Zoology; students must take either the 400-level lab sequence or the 400-level library sequence.

*BIO 2990 Evolutionary Biology, 4 summaries of 2-4 pages = 6-12 pp., 25% of grade (Rob McCandless)*

BIO 2430 Zoology, four partial exams, typically 2-3 pages each, 50% of course grade; one comprehensive final exam, typically 4-6 pages, 15% of course grade; 3 short informal papers (typically 1 to 2 pages), (Scott Robertson)

BIO 2440 Botany, 6-10 pp., 10% of grade (Clay Britton)

*BIO 3980 Vertebrate Comparative Anatomy and Evolution, 15-20 pp., (3 very short papers and a skeleton paper), 20% of course grade (Margaret Folsom)*

*BIO 4010 Embryology and Developmental Genetics, 10-15 pp. (3 short papers), 25% of course grade (Margaret Folsom)*

*BIO 4400 Cellular Physiology, 25-30 pp (3 short papers and lab reports), 25% of course grade (Margaret Folsom)*

BIO 4880 Library Research Project, Part 1, 6-10 pages, 90% of grade (all faculty)

BIO 4890 Library Research Project, Part 2, 20-25 pages, 60% of grade (all faculty)

BIO 4900 Laboratory Research Project, Part 1, 6-10 pages, 90% of grade (all faculty)

BIO 4910 Laboratory Research Project, Part 2, 15-20 pages, 60% of grade (all faculty)

### III. Rubrics

Rubrics for 2440, 2990, 4010, and 4400 on file.

**Rubric for Botany (BIO 2440) Experimental Design**

	<u>Maximum Value</u>	<i>Additional Comments:</i>
<ul style="list-style-type: none"> <li>• <b>Title</b> <ul style="list-style-type: none"> <li>▪ Descriptive and informative.</li> <li>▪ Allows audience basic understanding of topic.</li> </ul> </li> </ul>	(+2)	_____
<ul style="list-style-type: none"> <li>• <b>Introduction</b> <ul style="list-style-type: none"> <li>▪ Pertinent information.</li> <li>▪ Places experiment in context of reviewed, scientific literature.</li> <li>▪ Lays adequate foundation for rest of paper.</li> <li>▪ Includes a hypothesis, which is correctly formatted, testable and falsifiable.</li> </ul> </li> </ul>	(+25)	_____
<ul style="list-style-type: none"> <li>• <b>Experimental Design</b> <ul style="list-style-type: none"> <li>▪ Effectively describes experimental design.</li> <li>▪ Correctly formatted (e.g., sources, headings and subheadings).</li> <li>▪ Protocols explained clearly, concisely and accurately. Logical.</li> <li>▪ All materials included and incorporated.</li> <li>▪ Procedure remains focused on hypothesis.</li> <li>▪ Appropriate controls and variables are identified.</li> <li>▪ Relevant statistical analysis is included.</li> </ul> </li> </ul>	(+40)	_____
<ul style="list-style-type: none"> <li>• <b>Mechanics</b> <ul style="list-style-type: none"> <li>• The paper is between 6-10 pages; Including figures, tables, etc.</li> <li>• Writing style is scientific and professional.</li> <li>• Contains minimal grammatical/typographical errors.</li> <li>• Charts, figures, and tables are legible, referred to in within text, as well as cited and used correctly.</li> <li>• References are cited appropriately throughout paper.</li> <li>• References are current, applicable and predominantly from peer-reviewed journals.</li> <li>• Sources located in paper but not in reference list.</li> <li>• Sources located in reference list but not in paper.</li> </ul> </li> </ul>	(+25)	_____
<ul style="list-style-type: none"> <li>• <b>Peer Assessment</b></li> </ul>	(+8)	_____
		<b>Total _____</b>

**Bio 2990 - Evolutionary Biology & Population Genetics: Article Summary Rubric**

Student:

<u>Criterion</u>	Points Possible	Points Awarded	Notes
1. Proper summary format	3		
2. Student identified author's main purpose	4.5		
3. Student identified author's supporting points	4.5		
4. Student paraphrased author's words	3		
5. Proper in text citation (E.g." Dawkins (1986)....")	3		
6. Minimal grammar and spelling issues	2		
7. Focused and well organized	2.5		
7. Student in attendance on day of discussion	2.5		
	<b><u>Total</u></b>	<b><u>25</u></b>	<b><u>0</u></b>

Additional points deducted (if any)

**Final score (%)**                      **0**

## **RUBRIC FOR BIO 4010 AND 4400**

The topic for the paper is appropriate 5 pts.

The introduction sets the stage for the rest of the paper and leads the reader into it. 5 pts.

Information presented in the body of the paper is accurate, and discussed at a level of sophistication appropriate for this class. 30 pts.

Material in the paper flows smoothly. The paper is well organized and well written. 35 pts.

The paper is carefully proofed and edited.  
It shows appropriate word choice. References are cited in the body of the paper. 15 pts.

A suitable bibliography is present 10 points.