

## Module 4: Argument

In this module, we will work to summarize, analyze, and synthesize information about a topic of our choosing, with the ultimate goal of developing and presenting an argument. This is our major project and what we've been working towards, and I hope you find it rewarding to use the skills we've been developing to craft something of your own. Also, in thinking about how the skills we learn in here will transfer and translate to other courses (and beyond!), I can 100% guarantee you that you will be asked to compose arguments again. They're the most common form of written discourse and they can serve many purposes.

For example, some of the common reasons we construct arguments are to: 1) share and interpret evidence 2) persuade others to think or act in a certain way, 3) explain a relationship or cause, 4) generate consensus, 5) propose a solution, 6) define an idea, or 7) raise a question. In our module on summary, you identified several specific examples of these motives in your readings. You have even written arguments before! Recall that in writing an analysis, you worked to critique, dissect, or expand upon a single text, with the ultimate goal of suggesting a better way of thinking or communicating. In writing a synthesis, you discovered new connections between texts, and then used these connections to evaluate support for an idea (agree/disagree) or to propose a new way of thinking. Like analyses and syntheses, arguments are leading to something. With argument, though, you have much more freedom to design exactly what that something is.

In ecology and biology, arguments are often used to:

- 1) Assess the level of support for a given theory or hypothesis, with the aim of evaluating its generality and/or identifying caveats to its application.
- 2) Assess the degree to which a particular phenomenon is understood, with the aim of identifying questions that, if answered, would improve our understanding.
- 3) Suggest that a particular process is responsible for an observed pattern, with the aim of proposing a means of testing of whether that process is actually responsible.
- 4) Refine our definition of a concept or term, with the aim of improving the clarity and precision of communication both within and across disciplines.
- 5) Suggest a new combination of hypotheses or ideas, with the aim of improving the accuracy with which a phenomenon can be predicted.

Developing an argument requires a lot of exposure to what's already been said about a topic. As such, we will work incrementally to develop an argument, beginning with the first step: identifying a topic. After we identify our topics, we'll use independent research to explore (broadly) what's been said about our topic by others. We will use the patterns that arise from this broad exploration to narrow our topics, and conduct a more focused exploration of our topics. We will use the questions that arise from this focused exploration to develop general arguments, and we will use our evolving interest and judgement to hone our arguments. I will facilitate the process of developing and refining an argument by providing in-class guided reading and writing activities, and by facilitating small- and large-group discussions. I will also meet with each of you individually during the drafting process.

The nature of your argument will vary depending on the topic you choose to explore and the relationship you develop with that topic. I have posted a couple of example arguments on Sakai, but please be aware that these represent only a small subset of the possible forms of argument:

1. Goff, L. J. (1982). Symbiosis and parasitism: another viewpoint. *BioScience* 32(4): 255-256.  
This is an example of #4 above: an argument to refine our definition of a concept or term, with the aim of improving the clarity and precision of communication both within and across disciplines.
2. Pica, N. and N.M. Bouvier (2014). Ambient temperature and respiratory virus infection. *The Pediatric Infectious Disease Journal* 33(3): 311-313.  
This is an example of #1 above: an argument that assesses the level of support for a given theory or hypothesis, with the aim of evaluating its generality and/or identifying caveats to its application. SEE NOTES IN .PDF for how the authors could have made their argument more apparent, which you should try to do, too.
3. Manley, R., M. Boots, and L. Wilfert (2015). Emerging viral disease risk to pollinating insects: ecological, evolutionary, and anthropogenic factors. *Journal of Applied Ecology* 52: 331-440.  
This is an example of #2 above: an argument assess the degree to which a particular phenomenon is understood, with the aim of identifying questions that, if answered, would improve our understanding.
4. STUDENT EXAMPLE: Howley, K. (2016). Anorexia nervosa: A novel treatment?  
This is an example of #2 and #3 above: an assessment of the degree to which a particular phenomenon is understood AND a suggestion that a particular phenomenon is responsible for an observed pattern, with the aim of identifying knowledge gaps and proposing specific suggestions for future work.

## Style

Like syntheses, arguments are directed toward an audience of specialists in the field or fields that they draw upon. When an argument uses evidence from a single field, authors use discipline-specific terminology and language, and assume that their audience is as familiar with a topic as they are. When an argument uses evidence from multiple fields, authors use terminology and language that's accessible to professionals in all of the fields that they draw upon. You'll need to decide, as your argument develops, which type of language is most appropriate.

## Format, submission and grading of Argument

The final draft of your argument should be **1,250-1,750 words** in length (about 5-7 double-spaced pages) and adhere to the formatting and citation guidelines laid out in our Syllabus.

**To receive full credit, you must submit, with the final draft of your argument, your first draft, the peer-review worksheets you received from your peer reviewers during our workshop AND a short description of how you revised your argument in response to the feedback you received (from either your peers or me).** This description can be in paragraph or bullet-point form, and should focus on the 2-3 revisions that you feel most improved your argument.

Your argument will be worth 40% of your total course grade and will be graded out of 40 points. The final draft will be worth 32% and evidence of revision (first draft, peer-review worksheet(s), and revision description) will be worth 8%. When grading arguments, I will pay particular attention to:

- 1) Introduction: do you introduce your argument effectively? Is the context of your argument clear?
- 2) Evidence and Synthesis: do you consistently use evidence to support your argument? Is your evidence presented synthetically?
- 3) Analysis: do you evaluate and assess the evidential value of your sources or do you treat all evidence equally?
- 4) Limitations/caveats/challenges: do you anticipate and consider alternative points of view or limitations to your argument?
- 5) Conclusion: do you return to your main argument? Does your conclusion follow from the evidence and the limitations you consider?
- 6) Organization and focus: is there a logical flow to the content of your argument? Are your thoughts and evidence consistently relevant to your argument?
- 7) Whether you develop the sections of your argument: does each section add something new to your argument? Does each section seem to be complete?
- 8) Language and tone: is your language appropriate to the disciplinary context of your argument (see the Style section of this assignment)? Do you seem engaged as a writer?
- 9) Summary: do you represent the texts you synthesize accurately and in your own words and sentence structures?
- 10) Revision: have you thoughtfully considered and integrated the feedback and comments of reviewers?

I have included the rubric I will use to grade your argument at the end of this assignment.

### Timeline for Module 3: Argument

<b>Mon. Mar. 6</b>	<b><i>Before class:</i> revise, complete, and print a final draft of your Synthesis (due in class along with evidence of revision: revision description and peer-review WS/annotated draft); READ Module 4: Argument assignment and examples therein</b> <b><i>In class:</i> Guided writing exercise: identifying and narrowing a topic</b>
<b>Wed. Mar. 8</b>	<i>Before class:</i> continue independent exploration of topics, come to class with a tentative topic Complete the 4 min. exercise on navigating libraries at: <a href="https://sites.duke.edu/library101/sample-page/navigating-libraries/">https://sites.duke.edu/library101/sample-page/navigating-libraries/</a> and create a Document Delivery/Interlibrary loan account. <i>In class:</i> (tentative) MEET IN LILLY LIBRARY Rm. 103: intro to library resources with Melanie Sturgeon, M.S.
<b>Mon. Mar. 13</b>	<i>NO CLASS: Spring break. Continue to independently research your topic.</i>
<b>Wed. Mar. 15</b>	<i>NO CLASS: Spring break. Continue to independently research your topic.</i>
<b>Mon. Mar. 20</b>	<i>Before class:</i> find, read, and take notes on <b>at least two potential sources</b> <i>In class:</i> Guided writing activity: responding to your sources and developing your voice.
<b>Wed. Mar. 22</b>	<i>Before class:</i> find, read, and take notes on <b>at least one more potential source.</b> <i>In class:</i> Guided writing activity: developing an argument and positioning yourself relative to that argument.

<b>Fri. Mar. 24</b>	continue independent research, <b>write thesis proposal (250 words max) with annotated bibliography (≥ 4 sources), submit to Sakai&gt;Assignments;</b> I will respond by 9am Mon.
<b>Mon. Mar. 27</b>	<i>Before class:</i> continue independent research <i>In class:</i> drafting exercise; goal: leave with a tentative outline of your argument essay
<b>Wed. Mar. 29</b>	<i>Before class:</i> continue independent research; use outlining resources to finish outline of your argument essay and draft 2-3 body paragraphs <i>In class:</i> ATTENDANCE OPTIONAL; open work on argument essay draft; opportunity to discuss with peers and Miranda
<b>Mon. Apr. 3</b>	<i>Before class:</i> continue independent research; <b>complete a first draft of your argument essay and print 1 copy.</b> <i>In class:</i> Guided peer review; sign up for a conference time
<b>Wed. Nov. 16</b>	<b>NO CLASS:</b> conferences; <b>revise to the comments of your peers before your conference,</b> come to your conference with a second draft of your argument essay
<b>Mon. Apr. 10</b>	<b>NO CLASS:</b> conferences; <b>revise to the comments of your peers before your conference,</b> come to your conference with a second draft of your argument essay
<b>Wed. Apr. 12</b>	<i>Before class:</i> <b>revise, complete, and print a final draft of your Argument essay (due in class along with evidence of revision: revision description and peer-review WS/annotated drafts)</b> <i>In class:</i> (tentative) metacognitive activity/reflective assessment

### Argument Rubric

Criteria	Evaluation				Multiplier	Points
<b>Argument</b>						Possible
Introduction	1 Missing clear statement of argument and context	2 Argument introduced clearly, context unclear	3 Argument and context introduced, some problems with clarity	4 Argument and context introduced clearly	1	4
Evidence and Synthesis	1 Argument not supported by evidence, evidence not presented synthetically	2 Argument not entirely supported by evidence, but evidence presented synthetically	3 Argument supported by evidence, evidence could be presented more synthetically	4 Argument supported by evidence, evidence presented synthetically	2.5	10
Analysis	1 Evidential value not assessed.	2 Evidential value implied, but not quite clear.	3 Evidential value of some sources clear.	4 Evidential value of most sources clear.	1	4

Limitations/ Caveats/ Challenges	1 Not considered.	2 Considered but not evidenced or not stated clearly.	3 Thoughtfully considered and stated clearly, but not evidenced.	4 Thoughtfully considered, evidenced, and stated clearly.	1	4
Conclusion	1 Doesn't return to argument.	2 Returns to argument, doesn't quite follow from evidence.	3 Returns to argument, follows from evidence but not limitations.	4 Returns to argument, follows from evidence and limitations.	1	4
Organization and Focus	1 Flow not entirely logical, some content superfluous	2 Flow not entirely logical, but content mostly relevant	3 Flows logically, some content superfluous	4 Flows logically, content relevant	0.5	2
Development	1 Some sections don't contribute, some feel incomplete	2 Some sections don't contribute, each feels complete	3 Each section contributes, some feel incomplete	4 Each section contributes and feels complete	0.5	2
Language and Tone	1 Terminology not entirely appropriate, tone is a bit aloof	2 Terminology not entirely appropriate, but tone is engaged	3 Terminology appropriate to audience, tone is a bit aloof	4 Terminology appropriate to audience, tone is engaged	0.25	1
Summary	1 Some problems with accuracy and not in your own words	2 Some problems with accuracy but summarized in your own words	3 Sources summarized accurately but not in your own words	4 Sources summarized accurately and in your own words	0.25	1
Revision	1 Missing all evidence of revision	2 Missing some evidence of revision	3 Peer-review worksheets and description indicate partial revision	4 Peer-review worksheets and description indicate thorough revision	2	8
<b>TOTAL</b>					<b>Out of 40:</b>	