

Essay Guidelines

Choose a concise topic that interests you and that extends what is presented in any one of the chapters in your text (some suggested topics are appended below). Find three or four good, recent references on the subject in any of the journals or books cited in BIOSIS (Biological Abstracts). Write a 200-300 word summary of your idea and turn it in together with your list of references (a doi or other web link is fine) any time before October 14. This should be submitted electronically to me at rgthorn@uwo.ca. I will read these and return them to you with comments within a week. If there appear to be problems with your choice of topic I will ask you to come in and explain it, and I will help you choose an alternate if necessary.

Write a 2500-3000 word essay summarizing the topic, due Tuesday November 18. Find a few more published, scientific references to round out your coverage. Summarize all of your references or present what you thought were their interesting contributions and weave this information into the framework of your paper. Be sure to have good organization (introduction, body, summary) and avoid colloquial style and words. Above all, I am looking for a complete, readable summary of your chosen topic. HINT: This means you should not choose a broad topic, or your summary of it will be incomplete and too general to be satisfying.

Specific guidelines:

1. Type papers doubled-spaced in 12-point font, with 1" margins on all sides, and number your pages. Underline or italicize Latin names. Use a spell-checker, but also read your text carefully to look for correctly spelled but WRONG words (e.g., "for", when "four" was intended). Check the word count of your document, excluding references. Submit as a Word document or Rich Text File (rtf) as an email attachment to me <rgthorn@uwo.ca>, no later than 5 pm November 18.
2. Late submissions will be deducted at a rate of 5% per day.
3. Include the title of your paper, the date, your full name and your e-mail address on the top of the first page. A separate title page is unnecessary and wasteful.
4. Have someone you know - a significant other, your mother, or your high-school librarian - read over your paper before you turn it in. You will lose points for incorrect spelling and poor grammar. My own writing suffers from wordiness, overly complex sentences and unnecessary punctuation. Try to do better!
5. Cite references to data or ideas that are not your own in the following format: "Herbivorous insects eat plants (Smith and Wesson 1996), but Jones (1997) found that carnivorous plants eat insects. Certain mosquitoes breed in the insect-trapping pitchers of the pitcher plant, Sarracenia (Wilson et al. 1992)." Use "et al." (short for "et alii/aliae/alia" Latin for "and others" m/f/n) to replace the names of the second and subsequent authors of papers by three or more authors (only in text, not in reference section at end).
6. List **all** of your references used at the end of your paper. Use the format suggested by the Canadian Journal of Botany (see Instructions to Authors; http://pubs.nrc-cnrc.gc.ca/rp/rppdf/cjb_instruct_e.pdf). There must be a minimum of 5 printed references (scientific journals or books); web sources may be used in addition if appropriate but must also be cited.
7. Plagiarism: Students must write their essays and assignments in their own words. Whenever students take an idea, or a passage from another author, they must acknowledge their debt

both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. Plagiarism is a major academic offence (see Scholastic Offence Policy in the Western Academic Calendar). Plagiarism Checking: The University of Western Ontario uses software (turnitin.com) for plagiarism checking. Students may be required to submit their written work in electronic form for plagiarism checking. Plagiarism may result in a course grade of ZERO, or worse – a requirement to withdraw from studies at UWO.

8. Avoid direct quotes, unless the exact wording of the original is outstandingly brilliant or represents a definition. Instead, rewrite in your own words, and then provide the reference citation as indicated above in #5-6.

Grading Scheme:

1. Content	Points
Overall organization of paper	(10) _____
Has a beginning, middle and end, with satisfying conclusion	
Originality and significance	(15) _____
An interesting read with relevance to plant evolution, and with scientific or applied significance clearly described	
Clarity of presentation	(15) _____
Writing that avoids fluff and repetition, use of figures as appropriate (no more than 3, with their source properly cited), and a style that conveys the story clearly	
Adequacy & appropriateness of references	(10) _____
2. Form	
Neatness and length	(10) _____
Grammar and composition	(5) _____
Spelling and punctuation	(5) _____
Format of literature citations	(5) _____
TOTAL POINTS	(75) _____

[Divide by 5 to obtain value for course grade]

Some suggested topics:

1. The evolutionary history, diversification and classification of xxxx (some group of plants).
2. Phylogeography of yyyy (some group of plants).
3. Origins and characteristics of the modern (or fossil/prehistoric) Gondwana flora.
4. Convergent evolution in xxx and yyy (two or more groups of plants with similar morphological or biochemical features not derived from shared ancestry).
5. What will barcoding do for the conservation of plants world-wide?
6. Extinct and endangered plants in Canada (or Ontario, etc.): status (names, where, etc.), threats, and legislation
7. An evolutionary overview of carnivorous plants

8. The story of xxx (a particularly interesting plant, such as wheat, the vanilla orchid, the world's largest flower, ...)
9. Lichens and air-pollution (excluding radiation): threats, prospects, mapping and monitoring
10. Is the fungus-alga relationship in lichens a mutualistic symbiosis?
11. What makes tropical rainforests so rich in tree species?
12. What is the nature of the relationship between vascular plant diversity and productivity (or other ecosystem measures) – if a relationship exists, why?
13. Invasive plants in Ontario (or, in Xxxx): origins and reasons for invasiveness
14. Plant conservation in Ontario (or in Hawaii, etc.)
15. Fossil forests in Arctic Canada
16. Palynology and vegetation history based on studies at Byron Bog (or Xxxx, Ontario)
17. A history and overview of the International Code of Botanical Nomenclature (or, the ICBN versus the Phylocode; or, Progressing from separate botanical, zoological and bacteriological codes to a unified code of biological nomenclature)
18. Plant fossils of “dinosaur land” in western Canada (or Nova Scotia, ...): age, identity, habitats
19. Zonality of algae and lichens on a rocky seashore in eastern Canada
20. The life and botanical contributions of Linnaeus (or, of Bauhin, De Candolle, Micheli, Theophrastus, ...)
21. The chemistry and adaptive value of hallucinogens (or other toxins) in the life of xxx plant in nature?
22. Industrial, pharmaceutical and food products from algae
23. Endless other possibilities ...