**Seminar guidelines**

**Biol 510, 2021**

**The four most relevant course learning outcomes related to completing this exercise are that the student should be able to:**

1. Explain and contrast indigenous ways of knowing with western science approaches
2. Describe the 17 United Nations Sustainable Development Goals and their unique significance
3. Discuss and critique the similarities and differences in fundamental philosophical concepts between indigenous cultures and western science that specifically relate to the sustainable development goals
4. Formulate clear, original, challenging, and concise thematic questions from course reading materials that are likely to lead to focussed and intellectually-probing seminar group discussions, student-led seminar topics, and short essays

**Seminar assignment**

For this component of the course, please prepare and deliver a seminar on some aspect that particularly interests you of the central course theme question – ***what specific insights can indigenous ways of knowing and relating to nature provide that would help our society achieve the United Nations Sustainable Development Goals?*** The most critical part of the whole exercise, and the key to a successful seminar, is to identify a clear and specific question that you would like to address. **Ask yourself, what is the most interesting question you can ask in relation to the content of your chosen *Braiding Sweetgrass* chapters that fits at least partly within the context of the broad course theme**. That question will be the core focus of your seminar. The question should be constructed so that it will likely lead to focussed, intelligent discussion that will move the seminar group toward some potential answer, or toward a more refined perspective on the issue/theme, or toward an even more refined question. The more interesting the question is to you, the more successful the seminar is likely to be for you, and for your audience.

Your ultimate goal as a seminar convenor is to excite interest in your topic so that your audience will be fully engaged and keen to discuss the ideas you raise, and therefore that they will leave the seminar afterwards with a much better understanding of the specific seminar question you have focused on, and how it relates to the overall course theme question.

You will need to be creative and think carefully about your chosen question, and you should expect to go through several iterations of the question as you read about the topic and refine your thinking. In many ways, **developing a clear, concise, challenging and original focus question is the most difficult part of the exercise, but once achieved will make for a very effective seminar**. The critical point is that the question is clearly focused on an issue that is of particular interest to you, and that is relevant to the overall course theme. I am available to assist and can meet one-on-one with you a week prior to your seminar, and you will also find it very useful to look at previous iterations of this course to see some examples of great seminar focus questions (<https://www.queensu.ca/terrestrial-ecosystem-ecology/teaching/biol-510-biology-sustainability>).

In developing your seminar question, remember that in addition to your chosen *Braiding Sweetgrass* chapters, there are many other possible readings in the course Reference list, and in the natural and social sciences databases (e.g. Web of Science) that may be of value. As you will soon discover, there is a substantial and rapidly growing amount of readily accessible information currently available related to the course theme. Remember that part of this exercise is aimed at familiarizing you with how to effectively access, sift through and synthesize that information. You will need to study a selection of readings that are relevant to your focus topic to help you develop and refine a broad, challenging, well-worded seminar question.

As convenor, **use the chosen *Braiding Sweetgrass* chapters associated with your seminar as a spring-board** to stimulate your ideas and generate an interesting and challenging seminar question. The latter, and your various sub-themes/questions in the seminar, should be primarily based on what really interests you. Yes, they should broadly fit within the course theme, but only broadly.  Remember that your entire audience will have fully and recently read the chosen *Braiding Sweetgrass* chapters beforehand – you should not even attempt to present all of the content within them. Instead, pick out the components that most interested you, and that therefore are most relevant to your seminar question, and elaborate substantially on those components using other readings, and your own thoughts and ideas. If you wish to focus mainly on the indigenous ways of knowing or relating to nature aspects, then that is totally fine. Alternatively, you may wish to focus mainly on the U.N. Sustainable Development Goals, and that is totally fine too. You could also choose to attempt integration of the two if you wish, but you do not have to.  You could even choose to focus primarily on some of the hardcore biological science components within many of the chapters, or compare western science and indigenous approaches to developing knowledge. In summary, just make sure you are focusing on concepts and questions in whatever realm really interests you (within the confines of the overall course question), and make sure that you are taking us to new understanding of those concepts.

You can do your seminar alone or in pairs, and scheduled seminar slots will be allocated on a first-come first-served basis, so e-mail me when you have decided, and indicate which slot in the schedule you (and your partner if applicable) would like most, and your second choice. Your initial idea for an individual or paired group seminar focus question should be sent to me at least 7 days prior to the seminar so that I can assess it and provide feedback. The earlier you send it to me, the more feedback I will be able to provide. **As a general practice, please plan on meeting with me immediately after the BIOL 510 session that is 7 days before your scheduled seminar.**

Finally, note that I am very keen to support individual approaches in this course, so if you have other suggestions as to how you would like to do your seminar apart from the detailed guidelines below (e.g. via debate, role play, etc.), please develop those ideas, and we can discuss when we meet one-on-one.

**Seminar exercise:**

1. Read your chosen *Braiding Sweetgrass*chapters very carefully, and highlight what you find most interesting, especially within the context of the overall course theme.
2. Develop a clear, focussed and intellectually stimulating question that you can use the content in your chosen *Braiding Sweetgrass*chapters to address. Note that the question should have a broader focus than the individual chapters. In other words, the chapters will not provide a comprehensive answer to your question, but will contribute toward answering it.
3. Consult the general and scientific literature on your topic of interest and synthesize the current status of information on that issue so that you can expand your audience’s learning beyond the chosen chapters. In addressing your seminar question, you are expected to use evidence from other readings to supplement the chosen *Braiding Sweetgrass* chapters.
4. Make an oral presentation (totaling no more than 15 minutes in normal lecture presentation mode, but that will in fact go much longer because it will be interspersed with multiple question and answer and discussion sections), aimed at stimulating ideas and debate for discussion focused on the theme of your seminar question. I am anticipating that the whole seminar including the interspersed discussion will take an hour or so. Having ~3 clear, focused, intellectually probing, sub-questions within your chosen theme is a very good mechanism to achieve strong discussion. You are encouraged to present in whatever way you think will most inspire your audience to engage with your seminar question. Powerpoint, debate, role play etcetera are just some of the possibilities. Activities are strongly encouraged but should be very carefully formulated. If you do choose to have your audience do an activity, make absolutely sure the participants fully realize its significance and the insights it offers to your overall question. Remember that the seminars should be highly interactive so that your audience are fully engaged.

The presentation should be suitable for an interested public audience, and **may** include some of the following headings (i.e. these headings are merely **suggestions** – you should devise a structure and approach that you think will be most effective to address your question):

A) **Introduction**. Introduce the specific topic you will focus your seminar on, its relationship to biology, indigenous philosophies, the sustainable development goals, and sustainability, and perhaps its historical context. It is often very effective as an ‘ice-breaker’ to make some personal connection to your chosen specific topic – e.g. why does it have special meaning for you? Then present your precisely worded seminar question. Make sure to write it up very clearly in your title slide (and also write it up on the whiteboard prior to beginning your seminar). Explain why you chose that particular question.

B) What are **the most interesting arguments or ideas** presented in the chosen chapters? Articulate and explain 2-4 of them during your seminar, and set them in the context of your broader overall seminar question. Note that arguments are derived and developed from ideas; and so arguments are particularly effective learning tools. If you can formulate the ideas within the chosen chapters that you find interesting into actual arguments, your seminar is likely to be particularly appealing and valuable.

C) **Why** are those particular arguments or ideas so interesting to you, and what **insights** do they provide in relation to the overall course theme?

D) **Critique** those arguments or ideas. What positive value do they have? What criticisms would you offer? Are they dependent on any important assumptions? Are there hardcore biological science aspects that you can add to support (or refute) the ideas presented?

E) Do any of these arguments or ideas directly relate to our civilisation’s capacity to achieve the **U.N. Sustainable Development Goals**? If so, explain in detail how and why they are relevant, and identify which Goals would be most impacted?

F) How does the **perspective and background of the author** influence the content of the arguments, ideas and conclusions?

G) **In what ways can the author’s arguments or ideas be improved or refined**? Review the specific seminar topic and what others have written on it.

H) **Are there any ideas in your seminar that link to material presented or discussed earlier in the course?** Be sure to articulate those linkages to earlier chapters or other discussions, and explain the connections, as this can be a great way of enhancing the deeper learning (and engagement) of your audience.

I) **What can we conclude in relation to your seminar question?** Provide a set of 2-3 ‘take home’ summary messages. This is a very important part of the seminar because you want your audience to go away with an improved understanding of the linkages between indigenous ways of knowing and relating to nature, and our civilisation’s future sustainability. In short, what interesting seminar discussion points would you like your audience to be talking about later that day with friends or family? Finally in your summary, it is generally a very good idea to include a synopsis of what you have learned from your audience contributions during the seminar.

**Seminar convenor(s):**

Seminars will be graded according to the following criteria:

A) identification of a clear seminar question

B) development of that question during the seminar using evidence from the chosen *Braiding Sweetgrass* chapters, and other sources

C) evidence of independent critical thinking

D) presentation clarity, enthusiasm and originality

E) discussion leadership

F) synopsis at the end of the seminar

Note the above very carefully - they tell you what I am looking for!

**Seminar participants:**

The success of this course as a learning instrument will largely depend on the quality of the discussions in each seminar. The main objective is to encourage your independent critical thinking on the linkages between indigenous ways of knowing and relating to nature, the Sustainable Development Goals, and the future sustainability of our current civilisation. Initiation and participation in the discussions following each seminar is a very important part of the learning process in this course.

Please read the assigned *Braiding Sweetgrass* chapters prior to each seminar, and come prepared with one written or typed-up discussion question related to the assigned reading in the context of the broad overall course question (see second paragraph above). Your question will be collected at the end of the seminar and graded by the seminar leader(s) on the basis of its quality (i.e. perceptiveness (i.e. depth of thinking), originality, and relevance).

**Final task for the seminar convenor(s):**

After you have given your seminar, you will collect the audience’s written-out questions.  They should be marked (out of 10) on the basis of their quality (i.e. perceptiveness [i.e. depth of thinking], originality, and relevance).  In addition to learning to assess and grade each other’s work, the second goal is for you to learn from the ideas presented within the questions.  Accordingly, I would like you to reflect on each of the questions, and write on the question sheet any useful comments or responses that you think the questioner will benefit from.

Please choose the best two questions out of all the ones you got...and write your selection (1st, 2nd) on those question papers before you hand them all back to me – within a week of your seminar please.

Finally, I will circulate a spreadsheet in which you can enter the marks (out of 10) and then send to me.