BIOL 202 Group project direction Part I

1. Group project timeline

1) Group Formation

- Each group consists of 6-8 members.
- Group members are selected randomly unless the student indicates preference in the Google survey form.
- Group will be announced on Jan 27th (Thu).

2) Member introduction to the group (individual work): due Feb 3rd (Fri).

• Once the group assignment has been completed, you'll gain access to the Group discussion forum on Moodle. The Group discussion forum is visible only to members of your group and instructor/TA. This area is hidden from the rest of the class.

The first message you'll see is a message from me. Here is a screenshot.



- Your first task is to post your introduction by replying to my first message. Explain who you are, what program you are in, and what you hope to achieve by taking this course. What do you normally do when you are not studying? Then comment on other members' introductions.
- The purpose of this introduction is to get to know the group members and to become familiar with the Moodle forum function. Please feel free to expand your conversation!

The deadline for this entry is Feb 3rd (Fri).

- 3) Complete Literature Search workshop Video tutorial (individual work): due Feb 10th (Fri)
 - The video tutorial will be available soon on Moodle.
- 4) Project topic selection and the title submission (group work): due Feb 17th (Fri) See the Part II direction
- 5) Outline submission (group work): due Feb 24th (Fri) See the Part II direction
- 6) Draft submission (group work): due Mar 17th (Fri) See the Part II direction
- 7) Publish the group work on Moodle Wiki (group work): due Mar 24th (Fri). See the Part II direction
- 8) Give feedback to other groups (individual work): due Mar 31st (Fri). See the Part II direction
- 9) Finalize Wiki page (group work): due Apr 11th (Tue). See the Part II direction
- 10) Peer-evaluation period (individual work): Apr 12th (Wed) Apr 17th (Mon). See the Part II direction

2. Project topic

Does X associate with Y?

- Other examples: 'Does X help to alleviate the symptoms of Y? Does X increase the risk of Y?'
- X is something that influences a health condition
- Y is a health condition
- Both X and Y should be something quantifiable
- There should be at least two original research articles that examine the subject

Your group will select a topic from the list of health conditions chosen by the instructor (See Part II instruction)

Last year's topic examples (this year's topics will be different)

- Does a Plant-Based Diet Lower the Risk of Cardiovascular Disease?
- Does a Plant-Based Diet Reduce Bone Mineral Density?
- Does poor oral hygiene increase the risk of cardiovascular disease?
- Does Red Meat Consumption Increase the Risk of Cardiovascular Disease?

3. Wiki page structure

You will publish your project on Moodle Wiki page. The wiki page should have four components: 1. Introduction, 2. Study One, 3. Study Two, and 4. Conclusion and recommendations

1) Introduction

This section should contain the following components.

- Project title
- Group ID and member list

• Introduction

- Describe the relevant background of the risk factor. Describe the relevant background of the disease.
- The text should have proper citations and hyperlinks, if necessary.
- Include an image(s), figure(s) or table(s), showing relevant information.
- Describe why it is important to examine this issue.
- Feel free to add one or two additional images to decorate the page.

For this part, you can get information from a wide range of sources. Acceptable information sources are:

- Research articles published in peer-reviewed journals (best but often difficult to understand)
- Textbooks
- Web sites that are maintained by large organizations which are deemed reliable.
 - public institutes, such as Centers for Disease Control, National Cancer Institute, World Health Organization, etc.
 - o not-for-profit private research institutes, such as Mayo Clinic, Salk Institute, etc.
 - \circ large volunteer-based health groups, such as Heart and Stroke Foundation of Canada, etc.
- Information obtained from the following websites should be used with caution
 - News articles (often inaccurate, too simplified and sensationalized.)
 - Press releases by institutes (often too optimistic)
 - Manufacturer's website (clearly biased)
 - WebMD (revenue depends on advertising and corporate sponsors)
- The following type of websites should NOT be used as information sources:
 - Personal blogs (unreliable)
 - Yahoo Answers, eHow, About.com, etc. (unreliable)
 - Personal YouTube videos (unreliable)
 - Wikipedia (get information from the original information source)

• Works cited

- List of the information source. For web resources, put the page title, institute name and the URL. Follow the APA style.
- The list should match the citations you used in the main text.

2) Study one

This section should contain the following components.

- Summary of the first research article
 - Select a primary research article that addresses the question you are asking and describe.
 - Study design: Human or animal? Randomized controlled study or observational study?
 - What did they measure?
 - What were the outcomes?
 - Include one (or two) figures or tables highlighting the result.
 - Is this finding reproducible? Are there other studies that showed similar results? Are there other studies that showed different results?
 - Feel free to add one or two additional images to decorate the page.

• Works cited

– See the description in the previous section.

3) Study two

• Summary of the second research article

- Select an article using a study design different from the first article. For example, if the first study describes an observational study, then try to find a study showing a randomized-control trial. The second article should be newer than the first article.
- What did they measure?
- What were the outcomes?
- Include one (or two) figures or tables highlighting the result.
- Is this finding reproducible? Are there other studies that showed similar results? Are there other studies that showed different results?
- Feel free to add one or two additional images to decorate the page.

• Works cited

– See the description in the previous section.

4) Commentary and recommendation

- Compare and analyze the findings of the two studies you presented. You should include a <u>clear statement(s)</u> that answers the Group project tile (yes, no, inconclusive, etc.). Then elaborate on how you reached that conclusion.
- Are there other studies that support or dispute the idea? If so, briefly describe.
- How does the information translate to the general public and our everyday life?

• Works cited

- See the description in the previous section.
- Contribution by individual members

4. Group project grading scheme

80 % Group grade given by peers: Final project is evaluated by 20-30 students.

Peer evaluation criteria

- The project contains all components listed in the direction.
- The project follows proper citation guidelines.
- The project is very well organized, with a logical flow from beginning to end.
- The contents seem accurate and are written objectively.
- The contents are easy to read and look interesting
- How does this project compare to other projects?

20 % Individual participation: evaluated by the instructor & TA. **Criteria**

- Complete 'the member introduction to the group.'
- Make meaningful discussion post in the group discussion forum.
- Contribute to Wiki page creation.
- Provide feedback to other groups.
- Submit peer-evaluation forms.
- Participation to class activity forum

Individual contribution adjustment

- Each member is evaluated by other members of the same group. Members who have not done significant work will receive a significantly reduced grade.
- If a member does not participate before the outline submission, they will be removed from the group activity and will receive a grade of zero.

5. Individual contribution/participation rule

Member participation is a critical component of this group project.

- Students who are deemed inactive will be removed from the group activity and receive a grade of zero (worth 20 % of the final grade).
- Low activity members will receive a significantly reduced grade (only 10 % - 50 % of group project grade).

Group works work best when most members are willing to participate and complete the roles they are assigned to. But you don't want to waste too much time chasing low activity members. I hope this procedure will calm your anxiety about group participation and you focus on your group work instead.

<Removal of inactive members from the group>

The following procedure must be completed before the reading break

(1) Inactive members are students who are not responding to other members' messages after *repeated attempts*.

(2) How do we define *repeated attempts*?

- 1. Obtain the e-mail address of the inactive member from your TA. E-mail to the member. Add your TA's e-mail address in the 'cc' field so that your TA is aware that you are making an effort to include the member.
- 2. If the member does not respond within 48 hours, contact your TA and the instructor. We will send a message indicating that the student will be removed from the group if he/she does not respond.
- 3. If the member responds with a valid reason for inactivity; and is willing to participate, please do your best to accommodate the member.
- 4. The member will be removed from the group if the member does not have a good reason for inactivity.

IMPORTANT: Please check to see the member name in the Participants list. If you can't see the member's name, he/she probably dropped the course. Then there is no need to contact the member.

IMPORTANT: Please do not exclude any members without the removal procedure described above.

<Low activity members>

(1) Low-activity members are members who respond to messages but do not contribute to the contents of the group project. If you feel a member is not contributing to the project, please communicate that to the member in a non-threatening manner. Often, it is due to miscommunications and/or misunderstandings. You cannot remove a low-activity member from your group activity.

(2) Please do your best to include the member in the group activity by assigning a role. But pair this member with somebody who is active. This way, you are not compromising the quality of your group project.

(3) If a specific member contributed far less than what he/she should have done, you should indicate that when you submit the peer evaluation for other members. If most members agree, then this member's group project grade will be significantly reduced. Again, please keep the communication record. I may have to ask you to present the evidence.

<Low activity groups>

(1) Low-activity groups are groups where only one or two members are participating.

(2) Follow the procedures about inactive members to solicit communications from other members.

(3) Contact the instructor if only one or two members are participating before the reading break. The sooner we recognize the issue, the better. The instructor will try to reorganize the group so that there will be at least four active members in a group.