Bio 110 Lecture (FS 2024-2025)
Notes to the student on lecture requirements

I. Guidelines for assignments and quizzes/exams

1. All students will be provided with the files (mostly as PDF documents) corresponding to the lecture topics as described in the course content. These files contain slide images from powerpoint lectures of the instructor and will serve as the materials for study in blended learning modes.

2. The study files will delivered online based on the ordered weekly topics as given in the study schedule of the lecture course guide. These will be made available through the Canvas LMS platform. (An alternative mode of delivery by other online means, such as through emails or a GC messenger, is an option).

3. There are assignments in the form of study questions accompanying the slide images in each lesson file.

3.1.   The class will be divided into groups (4 or 5 members per group depending on the class size). Each group of students is expected to submit their output by answering the study questions provided.

3.2.   Students may use the recommended textbook for the course to be able to answer the study questions. However, students may also use other hard copy or digital sources. Direct citations are not necessary for these assignments as long as printed and online references are provided. To a limited extent, i.e., for quick search or information compilation purposes, machine learning apps may be used (e.g., ChatGPT, Claude, ChatLabs) with details of usage being mentioned in the group output (such as keywords and date of access).

3.3.   The written assignment output should be submitted in hardcopy, with the following information : assignment topic, full names of participant members, date accomplished, study questions with answers, list of references, Back-to-back printed copies with plain text in size 11 font type are a must.

3.4.   The date for the submission of the assignment should be the day prior to the quiz covering the topics of the assignment. For example, if the quiz on Unit 1 topics will fall on September 30, then the related assignments should be submitted on or before September 29.

4. The faculty-in-charge of the lecture will be available for consultation within a prescribed workday schedule. Responses to inquiries sent through email or other online means of communication will be delivered at the soonest outside of official class and work hours.

4.1. Class monitors (at least two per section) to be assigned may be voluntary and necessarily should have good internet connectivity. In urgent situations (such as official class suspensions or nearing deadlines for tests), they can immediately communicate with the instructor and   vice versa. Except for instances when privacy notices should be upheld, all communications involving the entire class should be through an internet-based platform that can be publicized to the entire class (and not by personal email).

4.2. The long exams are already prescheduled (and the dates are to be announced at the start of classes). These tests will be administered in face-to face sessions during the regular class period of a class or as already provided in the syllabus.

4.3. Quizzes will also be administered in face-to face sessions, except when asynchronous online tests are recommended especially in situations which preclude in-campus activities. For these online tests, each usually with a 15-minute duration, the accessibility is provided within a locked-in period (e.g. between 1:00 to 2:00 pm on August 21, 2024 via Canvas Quizzes). Students can take the online test in only one attempt. There is no do-over, and so students must wisely choose the best time in which they have the most stable internet connection to take the test in one sitting. Refer to the course syllabus on the matter of missed exams or quizzes.

II. Guidelines on the oral presentation

1. A group may select a recent published scientific article for a 20-minute oral presentation and critique paper. The instructor will set the due date for the final selected article of a group.

2. The oral presentation will be held via a Zoom meeting during regular class hours in the week either prior to or after the last lecture examination. Each presenting group will be evaluated by another in breakout rooms during the Zoom meeting. All students are required to be present with a working camera for each breakout room.

3. An evaluating group is responsible for the recording of the oral presentation and submitting the same (or a link) to the instructor. Members of an evaluating group should include in the submission their individual ratings for the group based on the following criteria:

3.1. Organization (40%). Orderliness of presentation with proper sequence of subtopics and novel terms are defined in the correct places.

3.2. Content (30%). Concise information is provided when giving the basis of the scientific findings of the article without clogging the report with highly technical or supplementary details.

3.3. Mastery (20%). Knowledgeability by the presentors of the main content of the study, most especially with use of correct terminologies and identifiers (e.g., study design, biological materials, experimental group, dependent variables, etc.) and understanding of basic concepts.

3.4. Audience impact (10%). Extent of engagement of presenters with the audience. Visuals used are also important (which must be clear and easy on the eyes), relying more on using graphics than text. Figures or tabulated data may be restructured for easier viewing.

The rubric for each criterion is as follows:
Excellent = 4 to 5 pts (x CP, criterion percentage)
Good = 2.9 to 3.9 pts (x CP)
Satisfactory = 1.8 to 2.8 (x CP)
Poor = 1 to 1.75 pts (x CP)

Thus, a perfect score for an oral presentation by a group would be
(5 x 40%) + (5 x 30%) + (5 x 20%) + (5 x 10%) = 50%

It should be noted that a presenting group will be rated on the merit of their single presentation, such that the evaluating group will not necessarily have to be provided with a copy of the scientific article ahead of time.

III. Guidelines on the critique paper.

1. Each group is tasked to submit a critique of published scientific article for 20% of their lecture grade. A recommended site where published brief reports/short communications (from 2014 onwards) can be selected for a critique paper is https://royalsocietypublishing.org/loi/rsbl .

2. The deadline for this critique will be provided by the Faculty-in-charge. Consultation with the faculty-in-charge regarding details on the content and other technicalities of the paper is encouraged.

3. The guide for the critique and the rubric for evaluation is given in the succeeding pages. There will be three faculty evaluators for each critique paper, namely the class lecturer and the two laboratory instructors for the lecture section.

Guide for Writing a Journal Article Critique

A definition of a critique is that it is basically an essay (of roughly 2000 to 5000 words) which gives an analysis of the content of a journal article, especially a scientific one, mostly from a methodological perspective. The latter pertains to the appropriateness or validity of certain procedures or techniques utilized to answer a research problem. Nonetheless, a socio-political perspective may also be undertaken when looking at the implications of the findings of the study being critiqued.

The following table is derived from the website given at the end of this guide. In the table are some important parts of a research critique, with content being based on the answers to the questions given for each part. Note that depicting the content of the paper should be in your own words, and so apply paraphrasing as much as possible. Furthermore, be consistent in including citations to your own statements for or against certain points in the study. The format for such citations, as well as bibliographical entries in the references, follow those of the APA standards for technical writing (given in one of the online links at the end of this document).

Part	Content/Guide questions

1. INTRODUCTION
You should provide an overview of the study being critiqued (making more clear to the non-expert reader).
	This portion should give the title and authors of the study in question, and a summary of what the study has accomplished (mentioning the statement of the problem, the research objectives, and conceptual hypothesis and procedural approaches.) Among the questions to be asked are:
	  a. Is the problem statement clearly stated?
	  b. Is the problem "researchable" (i.e,, can it be investigated through the collection and analysis of data) ?
	  c. Is background information on the problem presented?
	  d. What type of study was conducted? Is it descriptive, exploratory or experimental with variables of interest being identified and/or the relationships between these variables being suggested?
	  e. Are the variables of interest directly or operationally defined (i.e., is the variable of a discrete category or defined in terms of a specific measure or quantity?)
	  f. Is a single hypothesis or multiple one presented? And are these hypotheses testable?
	  g. Is the significance of the study provided? Do you also agree with this significance?

2. MAIN ANALYSIS The main body provides a critique of the following: a. The literature review b. The materials and methods (including test subjects and statistical measures used) c. Presentation and interpretation of results d. Discussion of the findings	Because the article being critiqued is a scientific research paper, you can focus on how the scientific method is used to answer the problem statement. Questions on this portion can include the following: a. Is the review comprehensive? (A review of literature, if not presented under a specific heading in the article, could be concise and is often given within the first two or three paragraphs of the study.) b. Are the cited references relevant to the problem under investigation? c. What do you think about the appropriateness of the research design, test subjects, tools and techniques used for testing the hypothesis? d. Were ethical considerations applied for the human and/or animal subjects? e. Are the tools and techniques appropriate for measuring the intended variables? What information supports the appropriateness of the the tools and techniques for the samples under study? f. Are the procedures followed clearly described such that they can be replicated by other researchers? Or if methods developed specifically for the study, were their accuracy or validity been tested? Were sufficient controls to prevent biases in place? g. Are appropriate descriptive or inferential statistics presented? Were certain parametric assumptions violated, or could nonparametric methods have been better for the study? h. Are the tables and figures (if any) well organized and easy to understand? And are these tables and figures explained in the text? i. Are the findings discussed in view of the research hypothesis or intended premise of the study? Do the results agree or not with general or accepted knowledge of the subject matter?
3. CONCLUSION Give an overall description of the accuracy and validity of the findings of the study based on the research conclusion and provide your recommendations for improving some aspects which may need clarification.	You can give the conclusion of the study in your own words and for the final critique, questions to be asked can include : a. Were the research objectives sufficiently met? b. Are there generalizations that you disagree with? What evidences can support your perspectives on such statements? c. If a pilot study was conducted, are its execution and results described as well as its impact on the subsequent study? d. Did the researcher discuss or account for any potentially confounding variables that he or she was unable to control for? e. Have you some recommendations for improving the study or add for further exploration of the hypotheses presented? f. To what extent are the findings of the study and their implications applicable or relevant for your community?

Online references
1)   http://web.csulb.edu/~arezaei/EDP520/critique.htm
2)   https://www.mendeley.com/guides/apa-citation-guide

Title of Research Article:

_____
_____

Names of Submitting group members: _____

_____

Grading Rubric for Critique Paper

Criteria/Levels	Components		
	Introduction	**Main Analysis**	**Conclusion**
Content ○ Shows full understanding of the topic (4 to 5 pts) ○ Shows good understanding of the topic (2.9 to 3.9 pts) ○ Shows good understanding of parts of the topic (1.8 to 2.8 pts) ○ Shows poor understanding of the topic (1 to 1.75 pts)	**Points ____**	**Points ____**	**Points ____**
Organization ○ Very orderly presentation of main and specific concepts which are easy to follow or self-explanatory (4 to 5 pts) ○ Good presentation of main and specific concepts points are easy to follow but some ideas were out of place (2 to 3 pts) ○ Poor organization of concepts that is hard to follow. (1 to 1.5 pts)	**Points ____**	**Points ____**	**Points ____**
Quality of Information/Support (Evidence) ○ Information clearly to relates to the research topic with several supporting details (4 to 5 pts) ○ Information relates ot the research topic with a few supporting details (2.9 to 3.9 pts) ○ Information relates to research topic but no supporting details provided (1.8 to 2.8 pts) ○ Information or supporting evidences has little to do with the research topic (1 to 1.75 pts)	**Points ____**	**Points ____**	**Points ____**
Technical writing ○ No linguistic (grammatical) errors with correct voice, citations and bibliographical entries (4 pts) ○ Correct citations and bibliographical entries with some linguistic errors in grammar (3 to 3.75 pts) ○ Some errors with citations and bibliographical entries, and sentence construction (2 to 2.75 pts) ○ Several/consistent errors in grammar, manner of citation and bibliographical entries (1 to 1.75 pts)	**Points ____**	**Points ____**	**Points ____**

Final Score: (57 points = 100%)

Rated by: _____
Name of Evaluator and Date accomplished