

BCHE 6520

Assessment of Literature Reviews

Introduction

Students enrolled in BCHE 6520 will be assigned during the semester three articles to read from the recent scientific literature dealing with various bioseparation processes. The assignments will approximately align with the course content at the time of the assignment. Each student will be assigned the same article (i.e., students do not have the option of choosing their own article), and this article will be made available via the course website (<https://cmbe.engr.uga.edu/bche4520/homework.html>). The professor will also provide students with a list of 45-minute time slots from which each student is to propose three acceptable time slots. The professor will then communicate the interview schedule for that article, and the students will have approximately 7 days to read and comprehend the article. The general purpose of the interview is to evaluate each student's comprehension of the article according to the following rubrics.

Assessment

	Excellent = 3	Good = 2	Fair = 1	Poor = 0
Hypothesis	Clearly describes the hypothesis and provides an in-depth analysis, with evidence, as to whether or not the hypothesis was supported by the results.	Understands the hypothesis, and offers an opinion as to whether or not the hypothesis was supported by the results.	Shows limited understanding of the hypothesis, and is able to state what the primary results of the work were.	Does not articulate the hypothesis that the study sets out to test, and is unable to explain whether or not the hypothesis was supported by the results.
Methodology	Clearly explains the materials and procedures of the work; understands why the methodology was used, as well as its limitations; contemplates alternative methodology.	Understands the materials and procedures used in the study, with an understanding for how the methodology addresses the goals.	Shows a basic understanding of the procedures used in the study, with limited explanation for how the methodology aligns with the underlying goals.	Does not understand why the methodology was used in the work, or how it relates to its goals.
Quantification	Provides accurate and complete explanation of information in mathematical form; converts relevant information into an insightful mathematical portrayal in a way that contributes to a further/deeper understanding.	Provide some explanation of information mathematically; able to provide mathematical description of information in a competent way.	Provides limited mathematical description of information.	Is unable to relate the work to a relevant mathematical concept.
Presentation of Results	Clearly understands the graphical and tabular results shown in the work; articulates a sound interpretation of those results as they relate to the overall goals.	Describes the information that figures and tables show in the work and shows some understanding for how this information is relevant to the overall goals.	Shows rudimentary understanding of the figures and tabulated information presented in the work with limited explanation for what these results mean.	Does not understand the information displayed in figures and tables, and how these data relate to the goals of the work.
Critique	Identifies limitations in the work and its methodology using all relevant information, reflecting informed evaluation of the science/technology.	Identifies scope of work and its methodology, demonstrating ability to evaluate the work in the context of science/technology.	Shows understanding of the purpose of the work, but leaves some concepts undefined or ambiguities unexplored.	States problem considered without context, clarification or description.
Implications	Insightfully discusses in detail the conclusions and implications of the work and offers reasonable possible future work.	Discusses the conclusions and implications of the work with some ideas for future work.	Offers minimal understanding of conclusions and limitations and implications of the work, and few ideas for future work.	Does not understand broad conclusions and implications of work and offers no relevant possible future work.