HOW TO EARN AN “A” in NUTR 481

Welcome to NUTR 481. This course is designed to teach you to think, write, and talk critically. Follow these rules and you should have no trouble obtaining an A in the course. We begin by having you select a topic in nutrition that is of particular interest to you. This is your choosing, but your topic must address some aspect of nutrition as a motif and you must have approval of the instructor before going ahead. You then do a library search for research papers that address information on that topic. From your search you select three to prepare your talk and written synopsis. The papers must be original research articles and not review articles. No two may be by the same author nor come from the same research laboratory. If the papers disagree as to conclusions, you must take the position of arbiter and opine as to the strengths and weaknesses of each argument. Your synopsis must be an 8-page (minimum) double-spaced draft copy of the topic and contain the following divisions.

a. Title: Self explanatory
b. Objectives What was the focus of the study
c. Hypothesis What were their thoughts before performing the study
d. Approach What tools were used to obtain the data (subjects, procedures, etc.)
e. Results What did they observe
f. Conclusions What did they feel is the significance and learning outcome
g. Critique What do YOU feel are the strengths and weakness of any of the above

Your oral presentation will be 15 minutes with 5 additional minutes for questions and answers. The presentation must use a PowerPoint format with the three papers as your source material. After you have presented a talk to the class you will receive written comments from me and your classmates as to the strengths and weaknesses of your presentation. You will also be given comments for improving the information you presented. These will be in the form of suggestions that focus on important issues that also should have been included. With this information in hand you return to the library for answers to the suggestions. Having done this you can now revise your draft synopsis and submit it as a final synopsis to me by the deadline specified in the syllabus. Your grade for the written portion will be based on your final synopsis.

As a participant in the class, you will judge a fellow student’s presentation. This means reading two of the three papers that the student used to prepare the seminar and asking questions of the speaker regarding things you did not understand and would like clarified. Questions are to be submitted to me no later than the day before the scheduled presentation. Points will be deducted for lateness. Your questions must address concerns more so than simple curiosity. They must also have an answer that adds to the understanding. Consider the following questions regarding a presentation on the subject “what is the best diet to prepare a marathon runner”.

Dismal: Should the marathon runner drink more water before the race?
Weak: Do the suggestions for water intake for men also apply to women?
Better: The article states that four quarts of water may be expended as sweat during a race. How was this figure determined?
Best: The articles you provided indicated that water loss during the run was a major concern for endurance. Is there any diet that could have prevented or kept water loss to a minimum?
Note that “dismal” was a shot from the hip with little forethought. “Weak” had more value but may have touched on gender differences that were not taken into account. The “dismal” and “weak” call for an opinion from the speaker and have nothing to do with the main gist of the topic. “Better” justifies why the questions is being asked. It loses impact by not being related to “diet” as a key factor. “Best” both justifies the question and keeps the focus on the diet. Relating diet to water loss shows an interest in connecting dots to improve the understanding overall. More important, the speaker should be able to provide you with the information you seek.

PROTOCOL

1. Select a topic of particular interest to you; identify some specific aspect of that topic. For example, if you chose “sports nutrition”, consider papers that relate to the ideal diets for competitive athletes in some sport.

2. Get clearance from me to go ahead. If needed, I will give you suggestions for narrowing your choice so that your pending literature search will be more meaningful and focused.

3. Select 3 papers (2 of which will be submitted to the class) for background material. These papers must address separate aspects of the topic. They could, for example, represent repeat studies only with different objectives in mind. Avoid papers by the same author or laboratory to assure that you will have multiple input and opinions on the subject you selected.

4. The papers you select must represent original scientific data. They may not be review articles nor articles written by an author who did not do the original work.

5. Design your seminar so as to cover the three papers in the following areas: hypothesis tested, key techniques employed, results observed, and conclusions drawn.

6. Summarize over all 3 papers and leave the class with a “take-home” regarding the topic.

TIPS

1. Don’t just ask any question off the top of your head. Rather, give it some thought. Ask questions that call for more information or point to a potential weakness in the conclusions or the theory. Make sure they address specific points brought out in the seminar.

2. When you write your synopsis, cite contributions of each paper individually and three together to reach a coherent understanding. Overlooking the holistic picture is a weakness students make all too frequently and must be avoided. Remember, research is dedicated to advancing knowledge by giving a specific topic area a greater depth of understanding and a stronger interface with accepted facts.

3. You will be given specific suggestions for a revision of your draft. These need to be addressed to strengthen the paper. Don’t just simply correct the English or punctuations. Follow these and incorporate some of your own ideas into improving the draft. The goal is to make your paper as clear, concise, accurate and informative as possible.

4. Remember, this class is designed to make you more critical of what you read, write and hear. This may translate into the way you approach a research problem or a life situation later on in your career.