How to Answer “Case Study” Questions – PHR 356C

1. Making An Effective Argument
   A. Arguments are Everywhere
      Making an argument, or in other words expressing a point of view on a topic and then supporting it with evidence, is the aim of responding to all of the questions in the PHR 356C “case studies”.

      In this course, we want you to examine the “case study”, respond to each question and then defend your response with evidence. We are asking you to do more than just summarize information that you have gathered or regurgitate facts that have been discussed in class or found in your textbook. You must develop a point of view on or interpretation of the question being asked in the “case study” and provide evidence for your position.

      We want you to engage in critical thinking and debate.

      Argumentation is not just what your instructors do. The more you improve your skills in this area, the better you will be at thinking critically, reasoning, making choices, and weighing evidence.

   B. You Must Make a Claim in Your Answer
      What is an argument? An argument is usually a main idea, and is referred to as a “claim” or “thesis statement,” backed up with evidence that supports the idea. In answering the “case study” questions, you will need to make some sort of claim and use evidence to support it, and your ability to do this well will separate your team’s performance from those of teams who report mere summaries of fact and detail. You must stake out a position and prove why it is a good position for a pharmaceutical scientist to hold.

      When beginning to answer the question, ask yourself, “What is my point?” If your answers do not have a main point, they cannot be arguing for anything. Asking yourself what your point is can help you avoid a mere “information dump.” Consider this: your instructors probably know a lot more than you do about the subject matter of the question and “case study”. Why, then, would you want to provide them with material they already know? Instructors are usually looking for two things:

      1. Proof that you understand the “case study” as it relates to the module topic, AND

      2. A demonstration of your ability to use or apply the reading material (evidence) in ways that go beyond what you have read or heard.

      This second part can be done in many ways: you can critique the reading material, apply it to something else, or even just explain it in a different way. In order to succeed at this second step, though, you must have a particular point to argue.

   C. Evidence
      Do not stop with having a point. You have to back up your point with evidence, sufficient evidence. The strength of your evidence, and your use of it, can make or break your argument.

      How many citations is sufficient evidence? In this course, we expect that each point you support will be backed up by at least 2-3 peer-reviewed references.

      Every field has slightly different requirements for acceptable evidence. The type of evidence that sways us is the evidence of what counts as proof that something is true and correct in the pharmaceutical sciences. It includes statistics, a logical development of points, something from the object being discussed (materials, dosage forms, effect of properties on performance of dosage form), the way something works, or some combination of more than one of these things.
Be consistent with your evidence. Answering the “case study” questions is not the place for an all-out blitz of every type of argument. You can often use more than one type of evidence within an answer, but make sure that within each question’s response you are providing the instructor with evidence appropriate to each question. You cannot convince a confused person, so keep things tidy and ordered.

More on evidence is discussed below.

D. Audience
Your intended audience is a very important consideration in argument, and in this course, your audience is your instructors. You are not just expressing your opinion in an argument (“It’s true because I said so”), and in the “cases studies” your instructors will know about the subject at hand—so you will need solid proof. At the same time, do not think of your instructors as clairvoyant. You have to come out and state both your claim and your evidence clearly. Do not assume that because the instructors know the material, he or she understands what part of it you are using, what you think about it, and why you have taken the position you have chosen.

2. Evidence
A. Introduction
The questions being asked in the “case studies” will require you to make an argument; this means that you must take a position on the subject you are discussing and support that position with evidence. It’s important that you use the right kind of evidence, that you use it effectively, and that you have an appropriate amount of it. You must fully incorporate your evidence into your argument. Comments like “for example?,” “proof?,” “go deeper,” or “expand” in the margins of your graded assignment suggest that you may need more evidence.

B. What counts as evidence?
Before you begin gathering information for possible use as evidence in your argument, you need to be sure that you understand the context of the “case study” as it relates to the assigned reading material. Consider carefully the reading materials. It may give you clues about what sorts of evidence you will need.

C. What matters to your instructors?
In this pharmaceutics course, your “case study” responses might include graphs, charts, statistics, and other quantitative data as evidence. We consider primary sources (sometimes called primary references) to be the best evidence sources.

D. What are primary and secondary sources?
A note on terminology: we distinguish between primary and secondary sources of evidence (in this case, “primary” means “first” or “original,” not “most important”). Primary sources include original research papers, documents, photographs, interviews, and so forth. Secondary sources present information that has already been processed or interpreted by someone else, for example, a review paper on a specific topic in pharmaceutical sciences.

E. Where can I find evidence?
We have organized the “Pharmaceutics 356C Portal” for your exclusive use (see PHR 356C Syllabus for web link). Some examples of sources of information include books, journals, and websites are some of the most common sources of evidence for technical writing.

F. Does evidence speak for itself?
Your instructors say: Absolutely not. After you introduce evidence into your writing, you must say why and how this evidence supports your argument. In other words, must explain the significance of the evidence and its function in answering the question related to the “case study”. What turns a fact or piece of information into evidence is the connection it has with a larger claim or argument: evidence is always evidence for or against something, and you have to state and explain that link clearly.
You may be wary of elaborating too much because we think the point is obvious. But the instructors cannot read your minds: although we may be familiar with many of the ideas you are discussing, we don’t know what you are trying to do with those ideas unless you indicate it through explanations, organization, and so forth. Try to spell out the connections that you are making in your mind when you chose your evidence, decide where to place it in your answer, and draw conclusions based on it.

Consider these questions to yourself, they may help you explain how your evidence is related to your overall argument:

1. Ok, I’ve just stated this point, but so what? Why is it important? Why should anyone care?
2. What does this information imply?
3. What are the consequences of thinking this way or looking at a problem this way?
4. I’ve just described what something is like or how I see it, but why is it like that?
5. I’ve just said that something happens-so how does it happen? How does it come to be the way it is?
6. Why is this information important? Why does it matter?
7. How is this idea related to my thesis? What connections exist between them? Does it support my thesis? If so, how does it do that?
8. Can I give an example to illustrate this point?

How can I incorporate evidence into my paper?

In this pharmaceutics course, your evidence will be included as text in the body of your answer, as a quotation, paraphrase, or summary. Sometimes you might include graphs, charts, or tables.

G. Quotations
When you quote, you are reproducing another writer’s words exactly as they appear on the page. Here are some tips to help you decide when to use quotations:

1. Quote if you can’t say it any better and the author’s words are particularly brilliant, witty, edgy, distinctive, a good illustration of a point you’re making, or otherwise interesting.
2. Quote if you are using a particularly authoritative source and you need the author’s expertise to back up your point.
3. Quote if you are analyzing diction, tone, or a writer’s use of a specific word or phrase.
4. Quote if you are taking a position that relies on the reader’s understanding exactly what another writer says about the topic.

Be sure to introduce each quotation you use, and always cite your sources.

Like all pieces of evidence, a quotation can’t speak for itself. It’s important to avoid “plop quotations,” that is, quotations that are just dropped into your paper without any introduction, discussion, or follow-up.

H. Paraphrasing
When you paraphrase, you take a specific section of a text and put it into your own words. Putting it into your own words doesn’t mean just changing or rearranging a few of the author’s words: to paraphrase well and avoid plagiarism, try setting your source aside and restating the sentence or paragraph you have just read, as though you were describing it to another person. Paraphrasing is different than summary because a paraphrase focuses on a particular, fairly short bit of text (like a phrase, sentence, or paragraph). You’ll need to indicate when you are paraphrasing someone else’s text by citing your source correctly, just as you would with a quotation.

When might you want to paraphrase?

1. Paraphrase when you want to introduce a writer’s position, but his or her original words aren’t special
enough to quote.
2. Paraphrase when you are supporting a particular point and need to draw on a certain place in a text that supports your point—for example, when one paragraph in a source is especially relevant.
3. Paraphrase when you want to present a writer’s view on a topic that differs from your position or that of another writer; you can then refute writer’s specific points in your own words after you paraphrase.
4. Paraphrase when you want to comment on a particular example that another writer uses.
5. Paraphrase when you need to present information that’s unlikely to be questioned.

I. Summarizing
When you summarize, you are offering an overview of an entire text, or at least a lengthy section of a text. Summary is useful when you are providing background information, grounding your own argument, or mentioning a source as a counter-argument. A summary is less nuanced than paraphrased material. It can be the most effective way to incorporate a large number of sources when you don’t have a lot of space. When you are summarizing someone else’s argument or ideas, be sure this is clear to the reader and cite your source appropriately.

J. Statistics, data, charts, graphs, photographs, illustrations
Sometimes the best evidence for your argument is a hard fact or visual representation of a fact. This type of evidence can be a solid backbone for your argument, but you still need to create context for your reader and draw the connections you want him or her to make. Remember that statistics, data, charts, graph, photographs, and illustrations are all open to interpretation. Guide the reader through the interpretation process. Again, always, cite the origin of your evidence.