

AIMS Essay Requirements

1 What is expected in the essay

An essay should be a review of existing literature on a given topic. The sources can be textbooks, lecture notes or review articles or original articles or some of each. All and everything that is used needs to be cited. Most articles are now available online and for example "Google Scholar" can get you there quickly. Try for example searching for a few key words along with the words "Review" or "Introduction".

In the project, your task is to show that you have understood and critically reflected upon the material by making it your own. You make it your own by coming up with an original way for presenting the material that you are bringing together. Try to give it your own angle or spin. Wherever possible, try to put things into a larger context. Sometimes (hopefully very rarely) it may be necessary to stick quite closely to a source, e.g., when a calculation is to be presented and the source does it in a way that is just hard to improve upon. In this case, you can make it your own for example by filling in a few steps in the calculation that the author omitted. In this case, it is important that you point out at that place that you do so. Filling in steps obviously proves that you understood that calculation.

A good essay describes. An excellent essay explains. No original research is expected. But, you are encouraged to make educated speculations about what interesting things could be done in this area. You have been a regurgitating undergraduate for a long time. This is an opportunity to show that you still have some creativity left in you! Don't worry, you are not expected to solve the problem of quantum gravity here. Just show that you are thinking for yourself.

2 Format:

title+abstract page+ Introduction/Motivation + Methods+main parts + Results + Discussion & conclusions + References

Bibliography: Make sure you list your sources and the technology (software in particular) that you may be using explicitly. Of course you can use Wikipedia but you should not cite it - because it can change from day to day and because as it not (yet) reliable enough to meet scientific standards. Instead, cite books and papers that you may have found via Wikipedia. Also, it is good style to list items in the bibliography in that sequence in which they are first referred to in the text.