

# SCIE300 Science and Society Paper assignment (SSP)

## Overview of the SSP assignment

The goal of this assignment is to write a substantial paper on a topic relating to Science and Society. The final paper will be 2500-3500 words in length. Each student will have the freedom to select their own topic. The topic may be closely related to the assigned books for the course, or it may be completely unrelated to those books. The choice of topic must be approved by the instructor, but every effort will be made to accommodate individual student interests. There is one additional restriction on the choice of topic: it should not have substantial overlap with a paper you have written or are writing in any other college level course.

The intended audience of the paper will be a general scientifically literate audience, such as US college graduates who majored in one of the sciences. The paper should combine technical and factual content with societal or policy implications. It may argue a particular point of view, or it may attempt to lay out a range of options while explaining their advantages and disadvantages. The structure and style of our assigned texts by Tegmark and Mackay are a good guide for the structure and style of the paper.

The assignment consists of three milestones:

- SSP0: topic proposal and selection;
- SSP1: paper outline and annotated bibliography;
- SSP2: the paper itself.

Details of each of these milestones are provided below.

## SSP0: topic proposal

Submit a brief description of the topic or topics you are considering for your SSP assignment. The description should comprise at least 100 words; there is no maximum length. Your description should be submitted to Moodle by the due date. Within one week from the due date, you must meet with the instructor to discuss your selection of topic. Please make an appointment for this meeting in advance, whether or not it is during scheduled office hours.

You may propose a single topic or multiple topics. If you propose multiple topics, the instructor will provide guidance on making a suitable choice of topic.

SSP0 will not be awarded a numeric grade, but timely and satisfactory completion will form part of the PAE grade.

## SSP1: paper outline and annotated bibliography

SSP1 is the first graded milestone for this assignment, consisting of (i) a paper outline and (ii) an annotated bibliography.

Guidelines for the paper outline are as follows.

- Aim for about one page, although longer outlines will not be penalized.
- A bullet point format may be best, but feel free to structure your outline in any way that conveys it clearly.
- Remember that, as described above in the overview for this assignment, the paper should combine technical and factual content with societal or policy implications.

Guidelines for the annotated bibliography are as follows:

- No minimum or maximum number of sources is suggested. You must use your own judgment in determining the number, type, and range of sources that will be required to write a carefully researched paper on your chosen topic.
- It is essential that at least some of your sources are authoritative. Usually, this means the source is a book that has been published by a reputable press or an article published in a peer-reviewed academic journal. If you use a source that you believe is authoritative, but it is not a traditional scholarly source, you must explain why you believe is authoritative.
- Your bibliography may also contain less formal sources, such as blog entries, web pages, and articles from non-peer-reviewed publications.
- Give full bibliographic information for every entry, including author, year of publication, page numbers, name of journal etc. This information must be given in a standard bibliographic format, such as APA or MLA. For nontraditional or non-scholarly sources, full bibliographic information must still be provided. A hyperlink is not sufficient.
- For every entry, give a description of the content of that source in your own words. About 50-100 words per source should be sufficient. For articles, your summary should provide evidence that you have read the article. For books, is not necessarily expected that you have read the whole book, but your summary should provide evidence that you are aware of the contents of the book.

Please submit your paper outline and annotated bibliography to Moodle in a single document.

### **Rubric for SSP1**

The paper outline and bibliography are each worth 50% of this assignment. For the paper outline, an excellent grade can be achieved by providing a clear structure that achieves the goals described in the overview of the assignment. For the bibliography, an excellent grade can be achieved by following the guidelines above.

## SSP2: full version of Science and Society Paper

The SSP2 milestone consists of the final version of your Science and Society Paper. The paper should follow the instructions given in the above overview of the SSP assignment, and it should take account of the instructor's feedback on the SSP1 milestone. You are not required to follow the outline submitted in SSP1; you are encouraged to improve on that outline based on your own additional research and the instructor's feedback.

To obtain an excellent grade, the paper should adhere to the following guidelines:

- The paper should combine technical and factual content with societal or policy implications.
- The paper should contain analysis and synthesis of the sources, not merely summary of the sources. The introduction and conclusion should state clearly the contribution that you, the author, have made to the chosen topic.
- The length should be between 2500 and 3500 words. Feel free to exclude the bibliography from the word count.
- The target audience is US college graduates who majored in one of the sciences.
- The paper should provide evidence of research beyond the assigned course readings, some of which must be based on authoritative sources. See SSP1 for a more detailed discussion of appropriate sources.
- Include a bibliography and in-text citations, correctly and consistently formatted in any commonly accepted bibliographic style.
- Punctuation, spelling, and grammar are important.
- Factual and scientific accuracy is important.
- Clarity of technical explanations is important. Feel free to include charts or figures where appropriate.
- Structure is important. There is no single correct structure; use your own creativity and judgment in deciding how to structure your paper so the reader is both engaged and informed. Usually, this requires an introduction that provides an overview of the content and a conclusion that summarizes the content. The paper should provide smooth transitions and clear signposts to the reader indicating the topics being discussed and the logical flow of the argument.