

# Writing the Final Paper - writing instructions for the course MEC-E3004 Safety management in complex sociotechnical systems

## 1. General notes

*Please note: These instructions are mandatory*

The final paper will be written in good English or Finnish. No spoken language or slang will be used, except in direct quotes from someone who uses such language.

Always proofread your work carefully before sending it. If you are unsure about your language skills, have someone to proofread your text.

Font size will be 12 and line spacing 1,5, normal margins. Total number of pages should be around 10-15.

You can write the paper together with another student but note the following: Length of the paper needs to increase; with 2-3 authors the length of the paper should be 15 pages. Also, make sure to clearly indicate what the role of each author has been in producing the paper.

Final papers will be returned by 31.5.2022 via email: [reimanteemu@gmail.com](mailto:reimanteemu@gmail.com).

If you are unable to return your paper before deadline, you must notify the professor in advance and give a good reason for your need of more time.

The course cannot be passed without completing BOTH writing assignments.

The midterm assignment will affect the final grade especially in tight situations. For example, if your first assignment was excellent but your final work is mediocre, your course grade will be better than your final essay alone would merit.

## 2. Structure of the paper

The final paper must include following parts:

. **Cover sheet:** title of the paper placed to center of the page

Course name (MEC-E3004 Safety management in complex sociotechnical systems), author's name and student number and e-mail address, and date will be added to lower right corner of the cover sheet

. **Table of contents,** on page 2. Table of contents is neat, containing chapters and subchapters and appropriate page numbers. Chapters are numbered 1,2,3..., subchapters 1.1, 1.2, 1.3... Paragraphs are indicated by tab break in the beginning of the paragraph. As a general rule, a paragraph should not be less than four sentences long, unless sentences are very long.

. **Introduction:** purpose of the paper, Case companies (if applicable), your main line of thought. Research questions. Introduction will be 1<sup>st</sup> chapter of the body text.

. **Chapters** + sub-chapters (number of chapters may vary): written discussion on the chosen topic using the course material (+additional material of your choosing), and your own reasoning. Remember to separate your own reasoning and conclusions clearly from quotes, and make sure you quote properly. When dividing your text into chapters, sub-chapters and paragraphs, remember that your text should be easy, logical and comfortable to read. Major change in viewpoint or subject = new chapter. Minor change= a new sub-chapter

Note: When presenting your own opinion, you should not only state what you think but also present the reasons behind your opinion. This way your process of reasoning can be followed and the quality of your conclusions evaluated.

. **Discussion:** main observations and their interpretations, theoretical and practical implications. Discussion chapter will be the last chapter of the paper. Recommendations based on your findings, if applicable. Also limitations of your study, including questions that were purposefully left open and questions that would have merited more studying.

### 3. References and source materials

- **Minimum amount of reference materials is five articles / books / chapters.**
- In addition, there needs to be at least **one reference to the lecture material.**
- **Majority of references must be scientific material.** Meaning: company-produced materials, brochures, news articles etc. have very limited use in a scientific paper, and your work should not be based on such materials.
- **Majority of references must be in English or in Finnish.** Professor must be able to check your references. For example, if you are discussing an accident that happened in Spain, you must still mainly refer to material written in English or Finnish, not Spanish.
- References: Harvard style is recommended for listing the references. Other systematic styles are acceptable as well, as long as you use only one style throughout the whole essay.
- It is better to use too many than too few references. New references are usually better than old (unless you are referring to a classic work that is still considered valid or you are discussing historical development of your subject.).
- All the references mentioned in the reference list must be actually used somewhere in the work.
- **Use of internet resources other than webpages, such as Youtube videos:** In principle, these are acceptable source materials. In practice, using these properly is not easy. For example, if there is a good video interview of an expert, there is probably also a literature reference available and you should use that.  
Example of acceptable use of a Youtube video: Video reference is footage from an accident you are discussing in your work. You describe the accident, referring to footage. Internet resources are like any other source material: you must write out the interesting point and

provide reference. Simply providing a link and asking the professor to check that out for information about the subject is a very bad idea.

## 4. Use of photographs and graphical elements

Sometimes photographs and graphics are helpful in presenting complex issues and can provide valuable support to the text. This being said, every photograph or graph must provide additional scientific value to the text so that using it improves the work as a whole at least as much as a written (sub)chapter of equal size. You should not use visual elements as mere illustrations. You should not use visual elements to make your short essay appear longer- as a general rule the space required by graphics is not included in the page count.

## 5. Evaluation and grading

The essay will be evaluated considering the following criteria:

- Style, design, layout, language.
- Objectives of the essay (clarity, ambition, relevance, research question)
- Comprehensiveness and focus of the essay
- Credibility and clarity of argumentation and results, use of the literature sources
- Use of concepts and theories introduced during the course
- Production and argumentation of own ideas and insights

## 6. How to proceed with the assignment

1. Read your lecture notes and course material. Search additional material (articles, textbooks, online material, including case company website). Make notes. You can also use mind mapping technique to arrange your material. Choose your viewpoint/research question.  
It is always good to have plenty of material when you start the actual writing. Develop a rough plan - e.g. titles for main chapters and most important subchapters. At this point, these are guidelines and you may end up changing them later as you make progress with your essay.
2. Start writing from what seems to be the easiest point. Continue to collect and review material. Make sure to follow writing instructions from the start, this will save you work later on. If you get stuck at some point, ask advice from professor or feedback from your coursemate.
3. When the first draft of the essay is done, read it through *critically*. What are its limitations and weaknesses? Should you remove a subchapter that has turned into a distraction, or should you write a bit more about an interesting point? Can you come up with good arguments against your conclusions? Make at least short notes of limitations and weaknesses in the discussion part, develop good counterarguments against the criticism that may be voiced against your viewpoints and add them to the text. If you notice at this point that your main argument does not survive a critical review, revise your work accordingly.
4. Finally, when you think your essay is ready, check the language and spelling, style, design, layout, quotes and references. Make sure that page numbers, chapters and subchapters still match the table of contents.