



## HSS392: English Scientific Writing

🕒 **Class Time** MTWTh 14:00 – 17:00

📍 **Location** N4, 1124

📖 **Credit** 3

👤 **Instructor** Professor Mik Fanguy ([mik\(at\)kaist.edu](mailto:mik(at)kaist.edu))  
Office: N4 Bldg., #1115

📚 **Required Materials**

### Course Summary

#### ★ Course Description

The purpose of this course is to guide undergraduate students through the process of writing a scientific or engineering paper focusing on the physical sciences, both experimental and theoretical. The course will start with a needs analysis to determine what you wish to achieve during the term. You will then be assigned to write a process essay to prepare you for science writing. We will then discuss what is meant by a *scientific paper*, including approaches and ethics. Text preparation, structure, and format will be considered next. Non-native English speakers who wish to write scientific articles or theses in English have special requirements. We will discuss some of these in class.

Throughout the term, students will work on their paper and do in-class peer review in order to understand the peer-review process and to learn to edit. In addition, we will address style and some pitfalls common in scientific writing including grammar. Also your paper will be checked for plagiarism as this will not be tolerated. If portions of your paper are plagiarized you will have to rewrite those sections. During the term there will also be online lectures on topics that are related to your paper that you are expected to view. By the end of the course you will have an edited paper that, with little modification, can be submitted to your department as a partial requirement for graduation (if your department requires this). During the final two classes, all students will give a presentation to the class summarizing the paper they have written.

#### ★ Course Goals

- Students will read professional journals and use them as a template for writing
- Students will write an experimental, empirical, or survey paper
- Students will understand the best approach to writing a major paper

#### ★ Course Objectives

- Students will organize their ideas clearly and logically in a paragraph or essay
- Students will write clear and concise sentences to achieve a readable style
- Students will write Introductions, Methodology and Results, Discussion, Conclusion, Bibliography and Abstract in an organized and logical format
- Students will learn and use the language conventions that are common for experimental, empirical research, or theoretical papers required for MS or Ph.D.
- Students will analyze professional journals from their own field of study

- Students will learn how to avoid common mistakes in scientific writing
- Students will perform peer-editing processes
- Students will use instructor feedback to revise papers

★ **Course requirements:**

Attendance: Attendance is required in order to pass this course. This class employs a “three strikes, you’re out” policy. In other words, your third absence, regardless of the excuse, will result in failure. Furthermore, for each unexcused absence, 5% will be deducted from your Attendance and Participation score.

Assignments: Students will be required to complete several writing assignments during the semester including the process essay, the first written assignment. In addition, students will complete a final project by the end of the semester. This will be a major paper based on your major. It can either be a Survey paper about a topic of interest to you or a paper based on research you have conducted. The reason to take this course is to teach you how to write a science/engineering paper. You can then use this example as a template for any papers you are required to write in the future. Classroom workshops and homework related to your paper will also be required.

**Course Evaluation**

Writing Assignments	25%
Quizzes	15%
Final Written Paper	40%
Final Presentation	10%
Attendance and Participation	10%

The final grade for this class is A, B, C, D, and F

**Note:** Because this is a graded course, students are required to submit *all* assignments in order to receive a passing grade. **There will be no Midterm or Final exam in this course.** Your grade will be based on the quizzes, the final paper that you have written during the course period, and your final presentation. Also, attendance and your viewing of the online lectures can affect your grade.

**Major Required Assignments:**

Process essay describing how to do something

**Final Project Paper consisting of:**

Abstract and Title

Introduction

Methodology

Results

Discussion/Conclusion/References

**Final Class Presentation centered on your Science Paper**