

WRITING ASSIGNMENTS OVERVIEW • ENGINEERING 0011/0711 • FALL, '09

WRITING ASSIGNMENT #1:

Presenting Myself: Recent Past, Present, and Near Future

Letter of Recommendation, 400-450 words

For Writing Assignment #1, students take on the role of one of their freshman year professors and compose a Letter of Recommendation from that professor about that student—student is both the letter-writers (in the role of a professor) and the subjects of the letters. The professor is writing to recommend the student for an engineering-related scholarship. Composing the Letter of Recommendation provides students with a first experience in articulating evaluative claims and supporting these claims with appropriate, effective details. Students have the opportunity to introduce and describe themselves in the “voice” of someone who knows them and contextualizes them in particular ways. Composing the Letter of Recommendation allows students to consider what they might like to achieve in their freshman year of study and beyond; allows students to consider what, in their recent pasts, led to their choice of going to the University of Pittsburgh Swanson School of Engineering; and allows students to understand the usefulness of their instructors’ coming to know them on an individual basis.

WRITING ASSIGNMENT #2:

Current Challenges and Issues in Engineering: My Point of View

850-950 words

For Writing Assignment #2, students examine the National Academy of Engineering’s “14 Grand Challenges for Engineering in the 21st Century” (found at <http://www.engineeringchallenges.org/>). Students choose a challenge and delineate a particular topic relevant to that challenge. Students then do research from contemporary sources—a minimum of 4 articles from trade and popular publications, from the past 5 years—related to that topic. Based on their research relevant to this challenge/topic, students present their own position on the importance—to engineering, to themselves, and to society--of this particular challenge.

WRITING ASSIGNMENT #3:

Engineering and Me—Why I Want to Be What I Think I Want to Be

900-1100 words

For Assignment #3, students research and analyze the field of engineering which most interests them—presumably, the field in which they intend to major. Students research professional societies in this field; working atmospheres, conditions, and salary ranges for engineers in this field; and jobs and job opportunities in this field. Another essential research component of the paper is the student’s research into his or her own interests and best capabilities. “Research” into the student’s own past—through childhood and through the high school years—provides details about what kinds of work, study, and play have been most engaging to the student. These research details, along with details provided by more conventional research into particular fields and jobs, allow students to articulate well-supported insights about their career decisions.

WRITING ASSIGNMENT #4:

Engineering Challenges, Ethics and Education: My Point of View

1200 words

For Writing Assignment #4, students return to the challenge/topic they wrote about in Assignment #2. Assignment #4 presents an opportunity for students to increase the effectiveness of their overall descriptions of the challenge/topic, while also requiring that they analyze the challenge/topic in terms of engineering ethics and engineering education. Drawing on research into engineering codes of ethics and further research into the challenge/topic itself, students now articulate the relationship of the topic to particular codes and tenets of engineering ethics. Also required is reflection on the very act of spending time researching, thinking and writing about this challenge during the freshman year of an engineer’s education.

WRITING ASSIGNMENT #5:

Summary Presentation: Completing the process by presenting your findings

For this assignment you will make two power point presentations that will be given in your small seminar section when you return from Thanksgiving break. The first presentation is the traditional ppt file with multiple slides. The second is a poster presentation. Each mentor section is doing it a little different, so contact your mentor for details. Each traditional presentation should be approximately 5 minutes long, with a minimum of 6 -10 slides. Use tables and graphs to display numerical data instead of text. Some of the slides should have images. Instead of long paragraphs of text, summarize the information into lists.

The purpose of this presentation is to summarize the writing assignments for this semester. The first assignment was a bio. The purpose of the paper was to get you to think about who you are, what are your interest areas and what are your strengths. The second paper had you find a trend in engineering to write about. The purpose of this paper was to have you look into the future and try and predict where your field of engineering is headed. The third paper was a detailed study of the present area of engineering you are interested in. The final paper was about society and engineering and how you see the two connected.

The purpose of this presentation is to look at the big picture and complete the circle. You know what your strengths are, you can see the present and future of the various fields of engineering, now tell me how it fits together for you. How do you see the trends taking you into an area that fits your interest areas. Tell me why you think the present working conditions in engineering fit into your goals and how your future plans are in line with what the trends are showing. Finally explain how you, society and work will all come together.

After you complete your traditional 6 – 10 slide presentation, your task is to summarize everything into one poster slide. This will be explained in class. Basically, there are two types of professional presentations. One involves standing in front of a room and talking through a number of slides. This is what the first part of this project deals with. The second type of presentation, is a poster. A poster is typically 24 inches by 36 inches. If you walk around the building you will see student posters from last year mounted on the walls. The purpose of these presentations is for the poster to act like a piece of art work that people read by themselves. Typically the author does not discuss this type of presentation. The content of the poster stands on its own. Walk around the building and review the various posters so you get an idea of what is required.