

New Visions Engineering Class Captain Assignment

NEW VISIONS ENGINEERING CLASS CAPTAIN

Each week, one student will be commissioned as the Class Captain. During that week, the captain will be responsible for providing several things, enumerated below, to the class, all surrounding a particular theme. When necessary, the Captain will also present the information to the rest of the class, which may require some research and outside preparation. The class captain will submit all the items needed on the Thursday *prior* to the week that they are to be captain, so that any necessary plans or adjustments can be made. The weekly assignments can be found on the class calendar. This is a graded assignment, and a rubric will be provided

PART I -- CURRENT NEWS

For this section, please locate at least four current and relevant (that is, probably not much more than one year old) news articles surrounding the topic that you have been assigned for the week. Please don't let the topic be limiting! If it is, for example, "space flight," you can find articles related to rockets, survival, payloads, fuel, efficiency and so on. You'll need to be prepared to present these articles to the class, which means that you should read and understand them, have links/copies/videos/text for them, and come prepared to answer (reasonable) questions and lead a short discussion. You're not expected to be a subject-area expert, but you should have a good overview of what the topic is all about. You'll present one article per day during your assigned week.

PART II -- BACKGROUND PRESENTATION

For this section, you'll need to give a short (five- to ten-minute) presentation on your topic. Many topics in engineering can be both broad and deep, and it will be your job to distill it down to the main idea or essence of the situation. For example, if your topic is "regenerating limbs," you couldn't possibly give the class a lesson on all the genetics involved, or how such a trait might have evolved; there are whole college classes on that. But you would need to give an overview of how a limb could grow back, under what circumstances, how this particular phenomenon could be useful by humans, and maybe what humans are trying to do with this through a medical and/or engineering lens. You should be prepared for some questions and discussion after the presentation.

PART III -- PRESENTER INTRODUCTIONS AND FOLLOW-UP

Most weeks we will have a guest presenter or field trip. It will be the Class Captain's job to introduce this person, either before he or she starts speaking or before we head out on a field trip, as well as to follow-up via e-mail with any questions that the class has. It will also be the

Class Captain's job to make sure that a thank you card is delivered. The Captain will also be responsible for presenting background information on the presenter, company or lab that we will visit, and collecting and organizing questions that we'll ask before the trip.

PART IV -- POETRY

This course is as much about English as it is about engineering (sort of...), and to that end, we need to study how the English language has been used throughout history. So, the Captain will be required to find a poem that fits in with the week's theme. After sourcing the poem, the Captain will need to give a short analysis of it, in terms of scansion, form and meaning, and then lead a short discussion on the poem's relationship to the topic at hand. This means that you should read the poem, understand it, and be prepared to explain things about it to the class. For example, why did the poet choose a certain word? What does it mean? Why is it a "good" poem?

PART V -- GOVERNMENT/ECONOMICS

This course, in addition to being an English and engineering course, is also a government and economics course! The class captain will be required to explain some of the regulations or economics behind the week's topic in a short presentation (which could be combined with the background presentation). For example, if the topic is "transportation," then you could tell us about the amount of trade between the USA and other countries, any new laws concerning trade, what is the most efficient means of transport, how goods will be transported in the future, or even if it makes sense to produce something one country and then sell it in another.

PART VI -- MEMES

Because this class is anything but serious most of the time, the Class Captain will be responsible for finding or creating at least three *school appropriate* memes that relate to the topic for the week.

PART VII -- DAILY CLASS SUMMARY

In order to keep track of what is going on each day, the class captain is responsible for filling out the daily log. This should include what happened each day in each subject. It should contain important concepts, assignments, reminders and any other relevant details. This should be a good resource for a student who is absent to find out what is going on, and also for those who were present to identify what happened on a particular day.

PART VIII -- LEADERSHIP

During the class captain's week, if there are any issues that arise that should be brought to the teacher's attention, or things that the class captain notices are not going smoothly, it is their responsibility to alert the appropriate people. This might include speaking to other students, the teacher, or some other school official.

PART IX -- WORD OF THE DAY

The class captain will be responsible for presenting four new, interesting and didactic words. This should include the word's correct spelling, the etymology of the word, and an example of it in use. Where appropriate, the information provided should also include an explanation of the roots of the word, and how it relates to other words. For example, the word "obstreperous," meaning noisy and difficult to control, includes the prefix "ob-" meaning against, as in "obfuscate," which combines the prefix with the latin word for darkness to mean to render unclear.

PART X -- QUIZ ON SUBJECT

The class captain will present a quiz (remember, a quiz cannot have a staple, so it can only be one sheet of paper) on the subject on the next class day after the class captain's presentation is over (generally the monday of the following week). The quiz will be worth twenty (20) points, and will be graded by the instructor, not the class captain. To this end, the class captain must also provide a key to the quiz. If desired, the quiz can be delivered electronically. The quiz should not provide students an undue burden in terms of studying, but should be rigorous, relevant, and pertain directly and exclusively to content presented during the week.

PART XI -- ECONOMICS TERMS

The class captain will present four economics terms, related or otherwise to the topic for the week. There are myriad economics terms out there, the captain should locate four, define them, and otherwise put them in context for the class. The realm of economics is wide and deep, so pick something interesting to share. The term could refer to personal finances, global markets, stocks, bonds, banking, regulation or any other branch of economics. The captain should provide meaningful context and examples, as many terms and concepts in economics are somewhat difficult to define without doing so.