**Official Group Project: Technical Proposal and Presentation.**

- Group Online Posts due: \_\_\_\_\_\_\_\_\_\_\_

- Proposal Draft Work Due: \_\_\_\_\_\_\_\_\_\_ for in class peer review workshop

- Final draft- Email complete powerpoint by \_\_\_\_\_\_\_\_\_, post entire project packet, (which includes all reflection papers)- \_\_\_\_\_\_\_\_\_\_\_\_. Prepare to present Tuesday morning.

* The assignment is a group/oral report of a proposal for a creative engineering innovation. Since 2017, various parts of the world: the United States (parts of Florida, Houston, the Carolinas), the West Indies (USVI, Puerto Rico, Dominica, islands of the BVI, St Maarten, Barbuda, Cuba, Anguilla, the Bahamas, etc,) and Asia (Indonesia, Japan, the Phillippenes), wildfires in both California and Australia, were drastically affected by hurricanes Maria, Irma, and Michael, earthquakes, wildfires, and a tsunami respectively. These areas are undergoing massive rebuilding projects, changing infrastructure, and considering ways to update various aspects of life in these areas so that such immense damage is less likely to occur in the wake of other natural disasters. Power grids, computer systems, roads, bridges, buildings, animal habitats, entire ecosystems, to name a few things, have been destroyed. Hospitals, airports, schools, water supplies, etc have been severely impacted. Despite the amount of human suffering that has occurred in the wake of these natural disasters, these natural disasters actually make for an engineer’s dream: How can you, as an engineer, positively impact these areas in their times of greatest need? Rebuilding and upgrading to better than once was will take years, especially if natural disasters of such magnitude return to these areas.
* Your task is to consider this in light of your engineering concentration (civil, electrical, computer, mechanical, chemical, etc) and develop a idea/innovation/product that is designed to assist the rebuilding process or improve an aspect of life in one of these areas in some way. Your design might have something to do with infrastructure: bridges, roads, sidewalks, etc. Your idea might have to do with solar panels and electrical grids, water collection (as islands are notoriously yet ironically always short on water), anything, there is no limit to idea but money must be considered (you need a budget, natural disaster repair is ALREADY expensive). \*These are just some ideas you are not required to use them.
* You will need to do some outside research to see what problems have surfaced where (as far as issue/location/reason), which you will incorporate into your project (that’s going to be the history/background part).
* The entire project requires
	+ 1 online blackboard post per team which answers the following questions:
	+ Project Title, Team/Company Name, Team Members, code of conduct, mission statement, boiler plate.
	+ Identifies what work is to be done
	+ Explains why this work needs to be done
	+ Persuades audience that the proposers are qualified for the work, have a plausible management plan and technical approach, and have the resources needed to complete the task within the stated time and cost constraints (the multimodal aspect)
	+ at least three audience analysis documents, (who are you presenting this to? Who are you impacting/helping with your idea/thing? How will this impact your content? This will also require some research
	+ A 1-2 page memo to the specific audience of this project.
	+ The engineering proposal document- min of 5 pages
		- a brief technical description of your idea/innovation/product, the proposal
* Job posting of a necessary staff member you might need that isn’t already on your team.
	+ a timed Powerpoint that each group will present to the class
		- Powerpoints must have a completed project outline (email)
		- Powerpoints should not be more than 10 minutes with an additional 5 minutes for Q&A session
		- Powerpoints must have a title slide, and reference slide with proper APA references and at least 6 content slides (yes you can have more)
	+ A reflection paper (of at least 2 pages) EACH group member will compose his/her OWN reflection paper and upload it.
		- each groupmate’s role in the project (exactly WHAT he/she did), the necessity/importance of teamwork/collaboration in Engineering, as well as analysis of how the projects fits into each of the the rhetorical elements and how the project met specific course learning outcomes
		- and discusses our “new normal,” one that engineers is “already normal” for engineers. The fact that this project will be done completely remote. We looked at Markel and he discussed that Engineers often work remotely because their team members could be in other zip codes, times zones, country codes, etc. Discuss this experience and how it has impacted the project’s completion
* Project objectives:
	+ Innovation
	+ Process
	+ Group work
	+ Oral presentation
	+ Overall thoroughness and logic of proposal structure
	+ Genre Composition and Analysis