Timing and Logistics of the Balloon Turbine Project

The project is situated within a 7 week term. For traditional semester based courses, the different activities may be spread further through the first half of the term.

In the statics course, the concept of 3D particle equilibrium is introduced at the end of the first week of class. The project is introduced when talking about 3D particle equilibrium.

Due to class size (90 students) the teams are currently set at 3 members which are randomly assigned. Students are given the full project description, rubric, QC review procedure, and rubric for QC. The week after the project is assigned, the students are given a hands on session in which they have helium balloons, strings, and fans. They interact with the props to get a sense of what happens when the anchors are spaced close together, far apart, or other types of configurations. This exercise is helpful in allowing students to see what it means to solve for a negative tension in a line (i.e. the string is slack, so it can not apply a “push” force). Additionally, at this session students are asked to think about the stakeholders in each of the regions and the effects of anchor construction in that zone.

The first draft of the project submission is due at the end of the third week of class. Student groups swap submissions so that the QC process can begin. The QC rubric is used as a guide for their reviews. Students have about half a week for the QC and then a few days to make revisions to their own work based on the QC that they receive from their reviewing group.

The final project submission is made in week 4, right around the middle of the course.

The calendar below shows the relevant dates

2017 August

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
31	01	02	03	04	05	06
07	08	09	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24 School Begins	25	26	27
28	29	30	31 Particle Equilibrium Introduced	01	02	03
04	05	Notes:				

2017 September

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
28	29	30	31	01 3D - Particle Equilibrium Examples PROJECT IS INTRODUCED IN CLASS	02	03
04	05	06 Hands on Balloon Exercise	07	08	09	10
11	12	13 Project Draft Due	14	15	16	17
18 Project QC Due	19	20 Final Project Draft Due	21	22	23	24
25	26	27	28	29	30	01
02	03	Notes:				