## **Mars Lander 2018 Timeline Assignment**

## WHAT GETS TURNED IN:

- A hardcopy of the completed calendar, listed below, that gets initialed by an instructor. All of your tasks and the milestones listed below should be located somewhere on the third column of your table.
- Print only the chart not this first page, when you are ready to take your timeline to an instructor for approval.

## **HOW IT SHOULD BE DONE (for full credit)**

- Read through the hand-outs describing the project guidelines and scoring rubric and look at what you marked as something that must be turned in.
- Next, together as a group, make a master list of all tasks that need to be finished, based on what you have marked on your handouts.
- Order these tasks in what you believe will be chronological order. We realize however that some tasks likely will (and should) be completed simultaneously.
- Place all of these tasks somewhere on the calendar on the next page.
- Your tasks should include more than what is listed here, but these milestones must be present on your calendar somewhere:
  - Initial lander model completion.
  - Initial transportation system completion.
  - Lander model testing completed.
  - o Lander model revisions made.
  - Lander model revision testing completed.
  - Transportation system testing.
  - Transportation system revisions completed.
  - o Transportation testing and calibration completed.
  - Solidworks drawing completion.
  - o Laser engraving of . . .
  - o CNC milling of . . .
  - o 3D printing of . . .
  - o Construction or creation of all components completed.
  - Completion of a poster for the 6/11 presentation at CH2M Hill. Posters are due on 6/6.
  - Formal launch day (6/4). Your final versions must be ready to go on this day.
- Every team member must have at least one assigned task to begin with. You do not need to put names on all of the tasks listed. You will assign names as you go and as members get done with their current tasks.

## **TEAM MILESTONES / TIMELINE:**

DATE:	INSTRUCTOR COMMENTS	TASKS TO BE COMPLETED BY THIS DATE (enter multiple as needed for a single day):	TEAM MEMBERS RESPONSIBLE FOR EACH ITEM:
4/18 (Wed)	Students are forming groups and completing this timeline.		
4/23 (Mon)	Students will work on unit conversions all day. Do not plan on group work time.		
4/25 (Wed)	Jacobs Engineering to present some design information on rockets. There will be an accompanying lab. Do not plan on group work time.		
4/27 (Fri)	Students will receive instruction on energy calculations. Assume only 45 minutes of group work time.		
4/30 (Mon)			
5/2 (Wed)	Students will receive instruction on linear regression (so you can calibrate your transport system). Assume only 45 minutes of group work time.		
5/7 (Mon)	Students will receive instruction on analyzing video with the use of Logger Pro (to determine velocities, heights, etc). Assume only 45 minutes of group work time.		
5/9 (Wed)	Jacobs mentors here to meet with Groups. Groups will need to be prepared to "sell" their design ideas to their mentors.		
5/11 (Fri)			
5/14 (Mon)			
5/16 (Wed)			
5/21 (Mon)			
5/23 (Wed)	Final Jacobs mentor check-in with groups.  Final day to submit parts for 3D printing.		
5/25 (Fri)	Final day for CNC milling.		
5/30 (Wed)			
6/1 (Fri)			
6/4 (Mon)	LAUNCH DAY.		
6/6 (Wed)	Posters due by the end of the period.		

6/8 (Fri)	All Day – only 45 minute	Students will practice their poster	All Group
	period.	presentations for 6/11.	Members
6/11 (Mon)	Poster presentations at Jacobs Engineering.		

Instructor Approval / Initials:	
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