**Related Rates Video Project**

In a group of two or three, design a related rates situation. Create a video of the scenario as well as a problem(s) to be answered. Use Logger Pro to analyze your video and solve your problem!!

Use the Cone Activity done in class as a starting point. Ideas to consider:

* Water or other liquid flow in different shaped containers. The key here will be to pour your liquid at a constant rate. This will take practice & more than one video to get right!
* Air filling up a spherical balloon. Need to think about the point at which the relevant dimensions can be measured.
* Other ideas will be approved on a case-by-case basis.

You will need to turn in: I:\MMSTC\Homework\Calculus Dewey\Related Rates Video

* The video (yes, the actual file)
* A student worksheet with directions and questions to answer (hardcopy AND Word file)
* A worked out answer key (hardcopy only)

Grading Criteria:

* **Design [10 pts.]**: Is it a well-designed related rates situation? Is the student worksheet well written and easy to understand? Does the student worksheet contain all necessary directions? Can the problems posed be answered with the created video?
* **Execution [10 pts.]:** Does the video illustrate a related rates situation? Does the video pay attention to BACKGROUND? Is the camera zoomed in on the object? Is the situation in the video clear and easy to see without interference? Does the video allow for insertion into LoggerPro and will it run?
* **Follow up [10 pts.]**: Is the worked out answer key correct, complete, and easy to follow? Are required elements turned in both electronically and physically?

Assessment Points: 30