Assignment: Final Projects

The culmination of this Music+STEM course is the creation of new songs by groups of students. Here are our expectations for this assignment:

- You may work individually or in groups of 2 to 5. The larger the size of the group, the better the finished product is expected to be.
- Your song should cover some aspect of STEM (Science, Technology, Engineering, Mathematics). Please cover specific STEM content, as opposed to making vague, general statements that require no understanding (like "Math is really fun" or "Cells are so important"). In particular, we challenge you to go beyond textbook facts to include some tidbits about the history of a problem, how experiments are currently done and/or what kinds of data have been collected. (For example, we consider "Myofibrils" [http://www.youtube.com/watch?v=GC_CUfLP6Pc] a facts-only song, whereas "Necessary But Not Sufficient" [http://www.youtube.com/watch?v=8HX34kHHDow] offers a taste of the data underlying the conclusions.)
- Your song can be in any musical genre (blues, rock, rap, country, gospel, reggae, etc.).
- Your song can be completely original, or it can be a parody of an existing song. However, it should be created by YOU. Do NOT hand in a song that you found on the Internet!

This assignment is due on the final day of class (Thursday, August 1st). You will do a short presentation/performance of your song at that time. In addition, you should hand in the following:

- Lyrics sheet for your song
- Musical score (if original music) for your song
- "Artists' Statement" explaining your song. Why did you choose the topic that you chose? What is the overall point of the song, and what specific STEM content is covered? How does the music reinforce the message of the lyrics?
- List of references consulted in creating the song (yes, you should consult references!)
- Any other materials that will help us understand and appreciate your song

Finally, here is some general advice:

- *Choose a topic that interests you!* If you don't care about your topic, your song may reflect that. To get topic ideas, scan the science/health/technology sections of a newspaper or news website.
- *Be specific.* Really broad topics like "electricity" or "calculus" usually make for boring, vague songs.
- *Start with the chorus.* If your song has a verse/chorus structure, consider putting the "take-home message" in the chorus and then adding supporting details in the verses.
- *Divide and conquer.* For example, one member of a group might lead the research on the STEM topic while another member focuses on the lyric-writing, a third is in charge of the musical performance, and a fourth is responsible for dance moves or visual illustrations of the lyrics.
- *Continue working outside of class.* We recognize that you all live in different places, but try communicating via email, texting, etc. to make further progress outside of class.
- *Let us know how we can help!* As different groups go off in different directions, we may not always know what each group needs, so tell us and we will do our best to support you, whether that means helping you understand a difficult passage of STEM content or offering ideas for arranging and performing your song. We want you to be successful! ☺