National Community College Aerospace Scholars Highlights

One of the reasons I took a hiatus from writing this blog was to focus on the NASA Community College Aerospace Scholars Course that I participated in. Consequently, posting the five greatest takeaways from this course is really important. Additionally, I want to say that my thoughts will be written from memory.

1. Mars has two moons. Astronomy is my weakest subject in regards to science. Naturally, I did not have knowledge of the moons of other planets. However, I learned that Mars's moons were named Phobos and Deimos.
2. 2. We are going back to the moon. When Neel Armstrong said "one small step for man, one giant leap for mankind," he was describing the progress and ingenuity it took for us to arrive there, as well as the scientific implications of such a journey. As I ponder Armstrong's quote, it becomes clear that the great leap is shaped like a circle. In fact, NASA plans to go back to the moon by 2024 and use the moon as a waystation to go to Mars. Appropriately enough NASA will be building a space station called Gateway which astronauts will dock spacecraft to before further exploration of the moon.
3. 3. NASA's space station is an essential national laboratory. The International Space Station (ISS) is a national lab which focuses on medicine, biology, and earth sciences. Medicine and biology intersect with experiments for growing proteins as crystals. Pharmaceutical companies are interested in growing proteins on the ISS because the ISS is in a microgravity environment. The microgravity environment allows these proteins to line up better. Earth science is performed on the ISS with several instruments. For example there is a satellite called HAICO which measures bathymetry, fito plankton concentrations and other characteristics to determine water quality on our coasts. 4
4. . NASA and partners in industry are doing their best to make aircraft travel more environmentally friendly. They are partnering with industry to rethink how aircraft are designed. For example, they are trying to reduce the length of vertical tail needed for takeoff. Also, they have partnered with Boeing to reduce the number of bugs that stick to aircraft which in turn reduces drag. The Environmentally Responsible Aviation division is working to accomplish this goal by designing nonstick codings that repell bugs from the wings. Many more facts and figures could be discussed; however, it is important to stay brief.
5. 5. The NCAS program was beyond awesome.
6. If I told you that there was so much to learn by participating in this experience that would be an understatement. Anyone could complete all of the modules; and still know that the course has way more information to give. More importantly, I have realized that this course is the best way to engage with science because NASA is mission focused; and is centered on using science and engineering to improve all of our lives. NASA exemplifies an organization that uses science as a candle to enlighten the world and beyond with knowledge. Furthermore, I know I have a place there if I continue to work hard. Once again, I am beyond grateful for this opportunity.