Team 1: Control in Future Entertainment 9:00-9:10AM

Timothy Beckmann, Derek Bailey, Clinton Grell, Jenna Root

Abstract:
Team one's topic is Control in Future Entertainment. We intend to discuss the following topics: Clifton Grell will talk about the future of amusement parks, Derek Bailey will share his vision for the future of special effects in the movie industry, Jenna Root will reveal a prediction of the future of the music industry, and if available, Timothy Beckmann will share an idea of traveling the world through virtual reality.

Team 2: Preserving Engineering Ethic Codes 9:15-9:25AM

Matthew Clark, Jigar Bhakta, Garrett Hohmann, Justin Shaner

Abstract:
The topic of engineering ethic is a hot button issue among the faculty and students here at OSU. As a student though, why should you care about engineering ethics? We are going to show you a few examples explaining why it is such an important issue and the consequences of breaking them.

Team 3: Engineering Thinking in Daily Life 9:30-9:40AM

Joshua Downing, Kelli Briley, Andrew Kadavy, Anthony Snow

Abstract:
We are going to differentiate between an engineering student's daily life and the easy life of others. We are going to show the analytical skills we use in making a decision versus those who don't. We are going to show that we have more responsibilities (homework, etc.) than the regular student. Optimization of time is also a key element in an engineering student's day. We will take you through a day with two people, one an engineering student, one a lazy non-engineering student.

Team 4: How to Effectively Manage an Engineering Project 9:45-9:55AM

Jennifer Kreger, Blaklee Burgess, Kirk Lewis, Patrick Sullivan

Abstract:
Define the project plan: One of the keys to effectively managing an engineering project is to clearly identify key goals or milestones. Seeking out a detailed description of all the key elements that need to be incorporated is essential to project success. Research, interviews, orientations sessions, and investigative behavior will help to attain this goal.

Developing the project plan: Once you have clearly identified all the project milestones the next step is to set a reasonable timetable, complete with deadlines. These deadlines need not be concrete at this time, but it is important to remember that as the manager you have to hold every individual accountable for the deadlines on each of the various phases of the project. Total project deadlines are your deadlines.

Procuring goods and services: The next step is to arrange for time at locations where the project must be worked. Whether this is in the lab, on the street, meetings, conferences, or on-site work it is paramount that these dates be secured very early in advance. Also, it is important to schedule all the people that are to be a part of the project. This can include experts, service workers, employees, co-workers, or vendors.

Dealing with change: It is also important to note that by definition an engineering project is a project in constant evolution. So it is important to recognize that all dates and or people are subject to change. Most importantly, the project definition is subject to change. Always know to ‘roll with the punches’.

Team 5: Control in Future Weapon Systems 10:00-10:10AM
Keith Larsen, Cody Crissup, Robert Mays, James Tyler

Abstract-
The focus of our presentation is on the four forms of military combat: Ground-based artillery for land warfare, effects of Electromagnetic Bombs in air combat, space exploration with SpaceShipOne, and naval advancements in aquatic based warfare. The future of the United States ground-based warfare is changing as current machine gun and vehicle weaponry becomes more revolutionary. Microwave and Electromagnetic Pulse Technology have both matured to the point of practical E-Bombs in the near future. SpaceShipOne and White Knight is the first privately funded manned space program testing the ability to enter space from the use of an airplane.

Team 6: Control in Homeland Security 10:15-10:25AM
John Madison, Benjamin Dvorak, Jason Pratt, Taiga Yamamoto

Abstract-
Our presentation will discuss many aspects of Homeland Security. One topic that will be discussed is the use of control systems in identification systems such as facial recognition systems, fingerprint identification, retinal scans. These systems are valuable in granting clearance into secure facilities and preventing others from gaining access. National Security has turned much of its attention to anti-terrorism, especially in preventing another attack that utilizes commercial airplanes. However, current airport screening systems utilizing metal detectors cannot recognize threats posed by nonmetal hazards. The relatively new field of terahertz spectroscopy and imaging could be used to scan for other nonmetal materials that could be used as a weapon. Another aspect of Homeland Security that will be discussed is the use of nuclear shelters. Housing is going to be a big problem, when worldwide wars break out. For avoiding the conceivable catastrophic consequence, we need to consider about the provision against some bad situations. For example, build shelters intercepting the radiation. Yet, another area of homeland security that we will be focusing on will involve the remodeling of military bases for greater security. This area may include things such as new perimeter security projects, and it will also extend to some of the changes that could be made on the grounds and in the facilities to insure more security. This has become a high priority in recent years and many ideas and changes have been developed.

Team 7: Distinctions among Engineering, Science and Technology 10:30-10:40AM
Ryan Shelton, Robert Fischer, Justin Pratt, Andy Steiner

Abstract-
Science, engineering, and engineering technology are three areas of fundamental importance to modern day society. The development of new technologies and methods has allowed the creation and advancement of multiple industries. This could not have taken place without the interaction between science, engineering, and engineering technology. Each of these groups, while having distinct differences, has developed a codependence on the others. The goal of the scientist is to investigate certain physical events through research and experimentation (they ask “why does this happen?”). An engineer strives to develop things or entities that can be employed to accomplish a specific task (they ask “how can I make this happen”). The engineering technologist applies what the engineer has developed to complete different projects for industry. The area of control systems can be used to illustrate the codependence of the three areas. The scientist may use systems that were developed by an engineer in order to advance his/her research. This research may lead to new theories which the engineer could use to develop new devices. The technologist creates what the engineer has designed in order to allow others to employ the new technology.

Team 8: Promoting Women in Engineering 10:45-10:55AM
Tcheula-Shue Siewe, Sarah Hamilton, Tiffany Ice, Krista Schone

Abstract-
We would like to use our time to present four aspects. First we will show how our college is active in promoting women in engineering and what aspects it requires. This will lead into the presentation of other national organizations and how they approach this subject. Then we will each give our personal ideas
of how we could attract women to the field of engineering. Finally each of us will present a woman that has made a vast achievement in the field of engineering. The main goal of this is to show that one of the best ways to attract girls to engineering is to show them that other women have done it; therefore, they can do it themselves. It is also interesting to see the accomplishments of women in our field.

Team 18: Control in Future Health Care  
Phillip Wingender, Carl Tompson, Donald Wyckoff

Abstract -
After rapid growth in the early 1990s, health care has became an important topic for the future of control systems. Currently, health care faces a need to drive care quality higher and control of costs lower. One innovation is a system that would help with the tracking of patients’ records and could revolutionize this industry. This system would store everything from old x-rays, blood type, past doctors, and even what a patient is allergic to. This system would allow records to be shared between hospitals and reduce the number of tests being done on patients. Other major innovation in the health care industry that would help people are new technologies to make hearing aids smaller and eye glasses stronger. Diabetics now have simplistic little machines that take less than a drop of blood to measure the blood sugar levels. Looking way into the future, researchers are contemplating nanotechnology. This technology would allow doctors to cure diseases on an atomic level and even be able to change types of tissue.