Gateway to Space – Messages to Spring 2015 Students from Fall 2014 Teams

<<<NOTE: The text below was provided by students in the Gateway to Space Fall 2014 class at the end of that semester. Students were asked to provide a message to students taking the class in the Fall of 2014 as part of their team’s final report. The messages below were compiled by the course assistant and were not edited in any way.>>> 

Team #1 – Team Orion

After completion of the semester each team member came up with one point they would like to pass on to the future Gateway to Space students.

● Nail the Proposal and Conceptual Design Review from the start

● Meet up at least two or three time a week

● Start a group text, email, FaceTime, skype, etc...

● Make sure you get all the stuff turned in on time (Don’t turn anything in late)

● Start building box early! ASAP!

● Keep your batteries as warm as possible during flight! Seriously!

● Predetermine where everything inside the box will go so it’s not crammed inside.

● Find good resources to use (professors, labs etc.) within the CU community to assist you, especially if you are doing a biological experiment

● Think outside the box, try to have original ideas for your satellite

● Be prepared to spend more time outside of the classroom than in it.

● Be a step ahead at all times.

Team #2 – Team Space Core

Maintaining strong communication with your team from the beginning will help everyone achieve success. This project is all about teamwork, patience, solving problems, and building a fully functional satellite from scratch with a limited time. The team should start planning ahead of time for their project, and they should compare every member’s schedule to find the correct times to meet. Learn from past experiments for common mistakes, major challenges, failures, and methods past teams used to solve their problems. Many teams had faced challenges similar to our own and to see that helped our project but also personally helps have failures not destroy your ego, because no project is without error. Aim for zero error, but don’t let one destroy yourself. This means that teams should be prepared for everything, including failure, but working together the experiment will be a success. Therefore, share responsibility and be open to others. Learn how to work with all types of people, and always respect the ideas of others. Sacrifice will be needed, but everything is worth it.
Team #3 – Roccat Express

When we were first introduced to this project, we honestly had no idea how challenging it was going to be. But like all things, the rewards are only as good as how hard the challenge is. Teamwork and time management were keys to our success in this project.

The first thing we did was choosing an effective team leader that we knew would carry out the project in an efficient way. The second thing we did was setting up designated team meetings 3 times a week at appropriate times. Don’t be afraid to become friends with your team members because you will have to spend countless number of hours working with them. Also, respect other members’ opinions.

Another important aspect of group projects that we learned is to keep an open mind. I’m talking about all senses of that phrase. Keep an open mind to new ideas and also keep an open mind in that your ideas won’t always be the best and don’t try to throw down ideas that you don’t agree with. If you want to be heard, put in the effort to be heard. It will make this experience a lot more enjoyable.

Have handy all the due dates and never hesitate to start working on the next major presentation early. Procrastination will lead to major amounts of stress and problems amongst group members.

The best feeling you will have during the course will be when you’re sitting by the BalloonSat ready to launch on the launch day seeing it lift off and fly away to the atmosphere. Definitely put a lot of work into making the project successful and may the odds be ever in your favor.

Team #4 – A New Hope

There are a couple of things we would like you to know about this class. First of all, this class is one of the most memorable, time consuming, amazing classes you will probably ever take. Take the time to appreciate the amazing feat of sending something you built into space. All of us had a fantastic time, and we all learned a lot of good lessons. On the subject of things we learned, here are a few tips. You should start soldering and testing early. If you don’t, then we guarantee that you will be spending a couple late nights working in the engineering center, eating Cosmo’s, and passing out on the floor. Second, try to make your wiring as neat as possible. Even if you think that you have an “organized disaster,” you don’t. You just have a disaster. Finally, don’t procrastinate and try to be as efficient as you can during your meetings. This class requires a lot of work, but it is definitely worth it. Have fun, because this is a very unique experience.

Team #5 – Red October

This class is going to be not only one of your most enjoyable this semester, but also the class into which you all will devote most of your time. To do well and prevent pulling multiple all-nighters, invest a lot of time in the class early on, so that the weeks before launch are not unbearably stressful. In addition, ensuring your team has a good chemistry is vital, as getting along is necessary to make a good mission great. Overall, just enjoy your time in ASEN 1400: it goes more quickly than you think!

Team #6 – The Destroyers

This class is a really good insight to a student’s future in engineering. It’s not so much about the “breaking new ground” or innovative side of engineering, as your project in this class is going to be (there are exceptions to this) inherently somewhat simple and on ground that’s probably been tread.
This class shall rather teach a very important thing: it’s a lot of work. Not only is there a great deal of initial work just to get something into space temporarily, and much more to use it for a valid mission, but there are also a lot of things that can go wrong. Expect and be prepared for anything that can go wrong because nothing shall ever go perfectly as planned, which is also a very realistic reflection of the real world in engineering. What this class shall do is test you to be prepared for discouragement and setbacks and to respond to them with confidence. Come into this situation knowing that everything shall not work out perfectly and knowing that you shall have to overcome frightful obstacles. Respond with willingness to succeed and you shall succeed in this class.

Team #7 – RadSat 3000
Creating the box and testing the box will take no time. The sensors Chris’s gives you work perfectly if you use the code he provides you. DO NOT USE A GEIGER COUNTER! Listen to Chris. If Chris says “Don’t use a Geiger Counter,” then don’t use a Geiger counter. There are plenty of people to seek help from in the ITLL and the DLC alone. Utilize your resources. And lastly, work diligently. This project will not be completed in less than a week and the documents and presentations will not be good if you wait until the last night to start them. When you think you’re 90% done, you are really only 50% done. You can always do more testing.

Team #8 – Seal Team Six
Expect this class to be incredibly difficult and time consuming, but also completely worthwhile. After you meet your team, be sure to meet as frequently as possible. Prioritize your tasks well, particularly, prioritize your wiring and coding above all else. Test as much as you possibly can! Make an effort to work well within your team, because you will be spending the majority of your time together. Make sure everyone contributes on the team and understands the project. When preparing for presentations, practice thoroughly and completely understand what you’re talking about, the questions may be difficult. Enjoy your time because this provides a lot of fantastic experiences, but it is what you make of it.