My expectations for this class were definitely met. The course was challenging, interactive, fun and exciting. One thing I did not expect was to become such great friends with my team members and classmates in general. Overall I enjoyed the experience and I would recommend the class to anyone.

Kind of? I expected it to be challenging but rewarding at the same time. It wasn’t since our project failed. I guess it teaches us about the real world and how everything doesn’t go as perfectly as planned. Still a bit of a disappointment. Otherwise, it was an excellent class!

I actually had no idea what to expect from this class going into it. It was just one of the options of classes I had to take and it sounded better than the freshman projects class. I still really wasn’t sure to expect after the first day of class with Hanz Koehler but I’m glad I decided to stay and see what the class was about. Once I got an idea of the class I was a little worried about how much work it would and if I could even get it done. Luckily I was placed in a great team and was able to accomplish the goals we set out to. The class was definitely a lot of work but it all paid off in the end. The class surpassed my expectations even though I didn’t really have any. I don’t think I’ve ever gone through something so hard but so rewarding and this was the best class of the semester for me.

My experience here actually exceeded my expectations, as I really enjoyed the class, learned a lot in class, and I would love to take another class like this! Mostly the fact that we have to work in groups the entire year, the topic of space, and the hands on projects that actually are sent off!

My expectations were pretty much met. It was challenging, fun, and educational. I learned a lot about electronics and the design process. What I learned is applicable to my interests in a career in the space industry. I can’t say that I expected my experience to be so disorganized but this is more an issue with my group than the class. The description given at the beginning of the class is very accurate. This class is definitely a roller-coaster.

My expectations for the class were nothing like it turned out to be. I had heard that the class was a lot of fun and a lot of work, but I had a class in high school that had that reputation and I hated it. So no I didn’t go into it thinking anything more than a class but wow was I wrong. I had so much fun this semester building our satellite with our team. So many amazing memories and awesome friendships were made. The day of the launch is without a doubt the most fun I have had in school all year. Waking up early and watching the satellites disappear into the sky and then going on a fun road trip to receive it just blew my mind. AWESOME CLASS!!!!

Yes and then some. This class was an extraordinary amount of work and it required me to put a lot of things I like on hold to work on either the design docs, building the sat or testing. It put a lot of pressure on me in the weeks before launch as we were desperately trying to finish everything up. Programming was exactly as hard as I thought it was going to be, which is good I guess, but there were weekends spent alone in my room trying to get code to work. Overall, I feel satisfied with this class as a whole and the satellite we built, and I’m glad I took it.

Yes, I expected a very challenging project and that’s exactly what I got. I wish that my team wouldn't have lost steam at the end and paid better attention to detail, but that is a lesson learned that I wouldn't have gotten in another class.

My expectations for this class were definitely met. It was a lot of work as expected and the launching of the balloon was satisfying. I expected Chris to be an effective and funny teacher and he did not disappoint. A lot of work.
Gateway to Space – Message to Fall 2014 from Fall 2013 Students

>> My expectations were met for this class. This class has made me a better engineer as it introduced me to the basic concepts of aerospace engineering with structures, thermal systems, CD&H, and more. It has helped me become a better team member as I have learned to work in a group to overcome adversity after our disastrous proposal. The class has taught me what a real aerospace mission requires: perseverance. Once we fixed one problem, many new problems would arise. This mirrored exactly what happens in every other aerospace mission and has helped me become a better problem solver as I had to come up with solutions for many varied problems, which ranged from sensor calibration to coding. Finally, the class reinforced my passion for air and space as I was able to send up a payload that I worked on. To receive data and pictures from a payload that was actually mine was truly exciting. This class allowed me to grasp space in a way I never had before and has inspired me even more.

>> This class was the most exciting and cool class I have ever gotten the chance to take. I lived my life in Italy, and I can guarantee that there you would never have the opportunity to fly something in space. I was able to experience the real meaning of the word “team work”, and I was also able to have “hands-on” experience with Arduino and hardware that I wasn’t even aware of their existence. I found out that I really like working with other people, and I would want to keep being involved in engineering projects. Also during the semester we were always informed about all the other options and project that were available to us, like HASP or ROCKETSAT. We also had the chance of learning about the history of space, and I found very interesting having “guest speakers” talking about their careers and jobs. This was only a starting point of what I would want my future life to be based on: working on teams and launching satellites!!

>> My expectations were met for this class. In homework one part of my expectations were “to learn many fascinating things about space and spacecraft development and to obtain knowledge that will help me later on in my life,” and I feel that I did learn many great and exciting things throughout the class. This class left me with a better understanding of spacecraft components and the modern spacecraft industry and I am glad to have taken it. However, my expectations of building the satellite were that it was going to be very difficult and near impossible to make, but in reality hard work over time made the creation of the satellite very possible. This is a lesson that can now be applied throughout my entire life, as I have more confidence in my engineering skills and abilities.

>> I expected this class to be a little bit easier, but I also didn’t expect to learn as much. I’m actually glad this class was challenging, because it forced me to learn a lot and quickly. The fast pace also pretty much ensured that mistakes and failures would occur, but I learned a lot from each one, so its good we made mistakes. I don’t regret any of my experience.

>> Personally, I thought this class really helped me in understanding and learning to become an engineer quite well. I enjoyed how it was relatively easy going in class, but although, class was fun and low-pressure, time spent outside of class in order to build the BalloonSAT was a little more hectic. However I did learn a lot about team work, time management, real-life and engineering struggles and practices in general through taking this course. This class also strengthened my knowledge in regards to the aerospace engineering field. Overall, the class is well worth it!

>> To answer your question, this class did not meet my expectations. That being said, it did exceed and obliterate my expectations altogether. I expected to enjoy this class and found it interesting that we would be flying actual low-scale satellites. Little did I know that this class would blow my mind on every level, provide me with experience working diligently on project with a team of other able-minded individuals toward a common goal, and altogether SOLIDIFY my decision to choose Aerospace Engineering as my major. If I had any doubt coming in to this class on whether or not Aero would be my major, it was erased during the semester, and nonexistent after flight. And then the Design Expo to top it all off made it feel like we were actually making a difference and providing for a possibility to change the future of BalloonSat creation, which was just intoxicating.

>>This class was amazing, and I could not put it any more simply or explain it any further. By teaching this class, you invoked a spirit of determination and pride in me that I never thought could reach the levels that it did. What you are doing as the professor for this class Mr. Koehler is just astounding and I could not ever be able to show you my true happiness for your teaching. Hopefully I will see you at Space Grant in the semesters to come!

>> My expectations for this class were definitely met! On the very first day of classes Chris warned us that this class would be A LOT of work. I definitely underestimated exactly how much work this class would require. Professor
Koehler also stated that all of the hard work would be very rewarding, and it indeed is! The experiences I have acquired and went through just to be successful in this class will definitely prepare me for my future endeavors as an Astronomy major and scientist.

>> Yes, my expectations for this class were met. In class, we covered everything I thought we would like the reasons and methods for going into space. The balloon satellite project was a great experience. I enjoyed working on it and launching it. The only thing that I would have changed is I had hoped we would go into more depth about the work of Wernher von Braun. I have long been interested in his work. I also felt that this class was probably the most useful this whole semester for providing experience for the engineering profession.

>> My expectations for this class have been met for the most part. I did expect this class to be hard, and believe me, it was hard. I worked on this class far more than I did on any other class, including my five credit hour calculus course. I also expected to learn a lot about projects. I now know much more than before about Arduino code, electrical circuits, system engineering, and working on a team. Some parts of the class, though, did not meet my expectations. This included the amount of in-class instruction, failure, and the closeness of my team. I did not expect to get as close as I did to my team. I hope that we will stay in contact in the future and care about each of my team members as people. I also did not expect to flat-out fail. I was on team America, and the coding failures that plagued our flight were a total surprise to me. I found out what it feels like to feel completely helpless, as I did not know very much at all about the coding side of things. I will learn from this and acquire some knowledge about everything that I am involved with in college. Finally, I was surprised with the lack of in-class instruction over the course of the semester. I can’t speak about whether or not it was a good thing, or about what else the professor could have done to prepare us, but I felt completely ill-prepared to handle a project of this magnitude. I do feel, though, that being put into that situation of being completely clueless prepared me for the real world.

>> I loved this class! It was definitely not fun all the time, but it was always worthwhile! It was one of those classes you never felt like you were wasting time participating in it. I really really enjoyed the guest lectures because they all gave excellent advice on how to ease well into a career in engineering by being proactive in college. The best advice I have received about what to do in college has been from these lectures! The class ended up being more influential than I had thought. I knew it was better than GEEN 1400 because of the high demand to get into this class and I considered myself extremely lucky making it into this class. At the design expo, I truly realized how much more of a learning experience it was to be in this class versus GEEN 1400. I learned how to work in a group better than I ever have before. I learned the true meaning of ‘trying your best’ and ‘putting in all of your effort’ when I was assigned to my group. I was very lucky to get the group that I got, although all of the kids in this class are awesome! I think non-engineering students and even some engineering students often insult the amount of effort engineering students put into their schoolwork, and things in life in general, but in this class I had the most respect for those kids that are considered like that. They really know to get things done! They pushed me more than I would have pushed myself. At first, I hated that we didn’t get to work on our project in class, but by the end of the semester I actually loved that because we did a lot better things in class. Out of all my classes so far, granted its only first semester freshmen year, this class taught me the most BY FAR about what it takes to be an engineer and what it will take to receive a degree in engineering. Watching the BalloonSat rise up and having it work for the flight was really fulfilling. Launch morning was a great experience. My social life went down, but I am terrible at time management so that was mostly my fault. This was the best class I could think of for someone being introduced to the world of engineering. Professor Koehler, you rock!

>> My expectations were met in this class and exceeded both positively and negatively. I expected quite a bit of work but I found that there actually was way more than I had actually expected, but on the other hand I had some expectations about how the class was going to go and the class has exceeded these expectations. To put it in some terms that our team used and what I think is very true is that this class is the most fun you will never want to have again. It was awesome but a lot of work.

>> I’m really glad I took this class. I was still deciding whether or not to stay in engineering. I don’t enjoy it as well as I thought I would. It’s just not me. All my expectations have been met.
Gateway to Space – Message to Fall 2014 from Fall 2013 Students

>> My expectations where more then met, I knew this class would be challenging and I would learn many things. However I never knew how all this knowledge would come together and how the final product of this class would produce a fully functioning payload. I was awed at how the class unfolded. I really enjoyed guest lectures, all the guests where invigorating and urged us to accomplish our dreams. This was a great class to take as a freshman and I am very grateful.

>> This is an amazing class. We learned a lot through the whole process.

>> The expectations that I had when entering class on the first day were not only met, but exceeded beyond what I thought possible. The lighthearted skit that had me pulled up in front of all my new class mates on the first day of class, was a great way to start off the semester by expressing how fun the class would be but by still shining a light on the amount of work that would need to be completed by December 12th course did an excellent job of assisting in my growth as a student as well as exploring career opportunities. At times it was stressful having to discover resources to utilize outside of class to learn some of the material, it was beneficial to know that it was very similar to what can be found in a real world working situation and the notion that Chris was always pushing us to succeed as far as we possibly could. If I could take this class again, I would.

>> Yes, all expectations were met in full. Project was challenging, but quite rewarding. This was the class I looked forward to most.

>> I would say my expectations were met for this class with respect to the amount I learned and the way it resembled the actual aerospace industry. However, just as everyone warned me, the class was a ton of work; definitely more than three credit hours’ worth. I do feel like some of the lectures were unnecessary and class time would have been better spent working with our teams on our satellite. But all in all, it was a great class, provided me with a great experience, and challenged me more than I ever imagined. I’m happy I took this class.

>> To be honest, I didn't have many expectations for this class initially, because I did not want to have unfulfilled expectations. However, I did expect there to be a lot of interesting lecture, which we definitely got. I was not expecting to have so much work outside of class; however, no time was wasted in the process. Whether we were hard at work, or having fun, I cherish all of the time I got to spend with my team.

>> My expectations were met. I learned about working in teams and creating a complete product. The engineering experience was invaluable.

>> My expectations for this class were not too high for this class when it began. I knew that I would be building a satellite but I was not prepared for the challenge that it would be. I was excited and it was still an exciting experience. I learned a lot and feel proud of my experience. This class was definitely worth taking.

>> I had very loose expectations for this class. I knew what I was getting into, but I wasn’t aware of the level of depth the project would entail. I learned wiring, structure design, a bit of programming, and how to build a functioning team. The amount of knowledge I have learned about the aerospace industry, and the process engineers go through to get a project into space is much more complex and thorough than I originally believed. The amount of work, planning, and constraints that make this up this project are much more challenging than I had come into this class thinking. I was expecting more help from Professor Koehler, but I understand why he stand as more of a bystander, and only helped when he saw appropriate. Overall I thoroughly enjoyed the class, and have very few complaints.

>> My expectations were met for this class. This class has made me a better engineer as it introduced me to the basic concepts of aerospace engineering with structures, thermal systems, CD&H, and more. It has helped me become a better team member as I have learned to work in a group to overcome adversity after our disastrous proposal. The class has taught me what a real aerospace mission requires: perseverance. Once we fixed one problem, many new problems would arise. This mirrored exactly what happens in every other aerospace mission and has helped me become a better problem solver as I had to come up with solutions for many varied problems, which ranged from sensor calibration to coding. Finally, the class reinforced my passion for air and space as I was able to

ASEN 1400/ASTR 2500 August 22, 2014
send up a payload that I worked on. To receive data and pictures from a payload that was actually mine was truly exciting. This class allowed me to grasp space in a way I never had before and has inspired me even more.

My expectations were greatly surpassed by this class. I came into the class with a love for space, but I was unsure what a future in aerospace was going to be. Professor Koehler and the guest speakers inspired me and gave me insight into what my possibilities for the future are. It was incredible to be able to launch a satellite before my first semester of college was over. This class will forever be something I look back on.

No, they were succeeded. I thought this projects class would be very surface level work: but with all the formal presentations, documents, and hardware/software to work with, there was much to be learned and experienced.

This class was a lot more difficult than I expected. The lectures were interesting and about what I expected for the class but the workload was a lot more. It’s hard to believe that building something so small could be so much work and stress! I’m disappointed that our mission wasn’t a success but I also learned more in this class than I have in any of my others this semester.

Going into this class, I didn’t really know what to expect. Initially I was only enrolled in this class because I needed the credits and the course description made it sound interesting. I didn’t know how involved it would really be. After finishing the class, I think any expectations I had were far surpassed. The class was a lot of work and very frustrating at times, but it was also a fun and interesting experience. Before taking the class I was focused mostly on astronomy and physics, but now I am also very interested in the engineering aspect. Great class overall and I would definitely recommend it to anyone interested in space physics or engineering.

My expectations for this class were met. Coming in, I anticipated a ton of work and a rewarding experience that was the product of working so hard on something. This was absolutely the case. Beyond this, my expectations were completely blown away. The class lectures on aerospace topics were incredible (way more than I expected from a projects class) and the guest speakers were fantastic. Thank you Chris for all of your hard work keeping this class awesome!

My expectations were surpassed. This class taught me more than I could hope about both engineering and myself. I learned so much about my electrical engineering aspect of the satellite. I basically made everything electrical in the box, which had 3 arduinos, 8 sensors, and a lighting station. For me to be able to do something as simple as coming up with a lighting system off the top of my head and have it actually work adequately, is an amazing feeling. I also learned a lot about myself. I learned I get frustrated when other people don't put in as much I do, but by the end I realized how awesome it was to be the guy everyone knew was working his hardest.

My expectations for the class were met. I enjoyed being able to get involved in different aspects of our satellites construction, and being able to see it fly after all the work we put into it was awesome. Despite having an enormous amount of problems before, during, and after flight it was a fun trip and we learned a lot from it. I think its definitely the best way any freshman can get involved with their aerospace major or whatever major they are in right from the start of college and gain a better understanding of what they will be doing in their career.

Yes, my expectations were far and beyond met for this class. Yes, it was very difficult and easily the most time consuming course I took this semester. But in the end, it pays off. It is such a good feeling to have done something so engineering related in my first semester of college. I want to thank you, Chris Koehler, for this awesome opportunity to gain some viable experience in the very beginning of my engineering career.

My expectations for this class were very general. I wrote, “I expect to further my knowledge about spacecrafts and space in general. I expect to learn how to build a balloon satellite and know the components of launching it. I’m taking it because I would like an intro to my aerospace major”. It was pretty obvious that both expectations would be met, however, I never thought it would be as much work as it has been. I didn’t think that out of a group of 8, only 3 would do most of the work. I really did like everyone in the group, it was just frustrating to deal with. This class took up most of my time. I was either driving back and forth to campus for it or, I was staying on campus all day because we had late meetings. Through it all, I have learned a lot. I am glad I took this class, because it really will prepare me for future projects.
Gateway to Space – Message to Fall 2014 from Fall 2013 Students

>> Yes, my expectations were fully met for the class. I was expecting it to be a load of work, and I was not disappointed, or I guess I should say I wasn’t let down. But along with the work, I expected to gain a lot of experience from the class and in this I was truly not disappointed. It was definitely a great class and I am extremely grateful that it is offered here at CU.

>> My expectations for this class were exceeded. I did not expect this class to be quite as much work as it was, and it was very frustrating at times. However, I did learn a lot and I am very glad that I took the course. I expected that this class would be an easy class but spending an entire semester on a group project was stressful at times because our group dynamic was very rough sometimes, when it came to splitting up the work. Overall, I am glad that I took this course and it has given me tools that I need to succeed.