



Fachhochschule  
Kaiserslautern

University of  
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# The Physics of Star Trek

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I taught a class “The Physics of Star Trek” the 2008 fall semester at the University of the Incarnate Word in San Antonio, Texas. At the end of the class I asked my students to write a short essay about their impressions. The essays follow:

## 1. Male, Age: 34 years

When the semester started, one really did not know what to expect. The subject was very intriguing, but the mysteriousness of the professor was even more exciting. Was this professor going to come to class dressed in outfits from the show, or will he have unprecedented access to information that nobody else has? This class has taught us many things, in reference to the show and to life. One thing is certain; anybody who will take this class is going to walk away with a different view on technology.

Growing up Star Trek was always on television, although not in the mainstream programming lineup, it was on none the less. One thought that exploring the details behind the written scripts is going to be wonderful. It was truly great, and to see how they provided the stepping stone to current technology that we use today was also remarkable. The single most important thing that was taken away from this class, to me, is that one television show can bring many different people together from all walks of life. There are professors from around the world working on demystifying the science, to science fiction fans waiting for the next movie or series to hit the air waves. This class is a great vehicle for that to happen, and one can truly say that this class provided great insight on things that most would not have known otherwise.

There is true science behind the scripts, for the most part. There are formulas for almost everything that the ship can do computer power, transport capabilities, and communications. In the sixties, when the show started, there were no cells phone, touch screen computers, and the very idea of space travel seemed far beyond the reach of man. Now all of those things have come to light, and it is based in partly on the show Star Trek. The ideas were real, and the future was heading in that direction, but to what extent, nobody really knew. Now looking back in retrospect, we can see that there are many things

that can be directly linked to the show. Communications is one thing that can be linked, just look at the modern cell phone and the personal communicators of Star Trek. They look very similar and can even do some of the same things. We now have touch screen computers, no keyboards or mouse required just like on Star Trek. These ideas are more of a public based spectrum, and the assignment called for more of a personnel opinion about how this class has had an effect on my life.

The main thing I got out of this class was the chance to learn more about Star Trek and the community that follows it. The show was alright, but this writer never really was into it that much. This class has really peak my interest again and has help me realize that it is a decent show, with real world possibilities. With doing a research project and learning more about characters, ships, scenes, and the different types of series there are, has allowed me to open the lines of communication with my brother-in-law. He is a true Star Trek fan who has gone to many conventions, has lots of memorabilia, and plenty of wonderful memories. He is truly impressed with my knowledge of the shows, and the true science behind it all. Even though I may not be ready to truly experience the full feel of Star Trek by going to a convention, at least now I can have a nice conversation about some of the theories behind it all. I know that this paper is not the most insightful, meaningful work about why a person would take a class like this but it is honest.

In short, the class is fun for the imagination, and has some scientific significance behind it. One will want to take the class for the value of physics, but for me it was to understand what Star Trek was about. After the class, one has learned that many people have researched Star Trek and have some great conclusions about the science behind it. This class has given me great insight to communicate with those who are true Star Trek fans, like my brother-in-law. Overall this was a great class and it is pretty fun too.

## **2. Female, Age: ?? years**

I must confess, before enrolling in this class I did not have much Star Trek experience. This is not a class I normally would have chosen, but one that I am very glad I took. My reason for initially enrolling in this class is because my former roommate wanted to take it but did not want to take this class alone; also she really loves nerdy guys and thought this class would be a great chance to meet some. I, being the agreeable type, said that I would be happy to take the class with her even if it did not sound like something I would find extremely interesting. Looking back on it, however, I am definitely glad I took the chance.

I did not realize that Star Trek was still so popular and that it was so loved all over the world. Indeed, its world and the people in it are more real to some than the world that you and I see every day. Doing research and watching Star Trek episodes while preparing for my presentation, I realized that some people spend their lives writing extensive articles and novels about this alternate existence that they find is more welcoming to them than what

we would call “the real world”. Also, many people are intrigued by the physical and technological aspects of Star Trek; indeed the science fiction found in the series has paved the way for many of the most important inventions of our time, including the fax machine and the cell phone.

I definitely believe that this class has changed my views about Star Trek. Before, I felt Star Trek was something only nerds watched and a series that was popular in the past but that had long since lost its fan base. However, after taking this class I learned I was wrong about these things. Star Trek still has many supporters and fans, and it has become something of a cultural phenomenon over the past forty years. I definitely do not look at Star Trek with disdain anymore, and I definitely have a lot of respect for its fans now. Most of these people are very intelligent, good people, and the technological aspects of Star Trek are really quite amazing and they give us a good view of what things could really be like in the future. It is clear that a lot of work and creativity went into making this series, and I can definitely respect that.

I definitely got a lot more out of this class than I expected, and overall I must admit that I am really quite embarrassed about how naïve I was about the series and how I was not able to recognize its popularity. Overall I will leave this class with greater understanding and respect for something that I previously knew nothing about, and I am really grateful for this experience and all of the knowledge I have gained over the course of the semester. Through the creation of this series, Gene Roddenberry has envisioned a positive, more decent future for mankind, and I think that is something everyone should respect, whether they be trekkers or not.

### **3. Male, Age: 21 years**

One of my earliest memories is talking my parents into letting me watch Star Trek VI: The Undiscovered Country with them one night. At the time, I did not know it was Star Trek VI. All I knew was that it was a movie I was not allowed to watch. I ruined the experience for myself when I ran away and hid when Kirk had to fight for survival in the Klingon prison. I really did not know anything about Star Trek and I did not think much about it again, until Star Trek: Generations came out. I saw it in theatres, not knowing what to expect, and was hooked. From then on, I watched all the movies, and all the shows I could find. My favorite series is Voyager. It started right when I was getting into Star Trek, and I followed it religiously. To me, Voyager touched on all the subjects that make science fiction interesting. It followed a crew lost in space, and that plot allowed the show to truly go where no one had gone before. Every week I was given the opportunity to see an alien species I had never met before. The crew was also interesting, with character studies in humanity that, to me, rival those of The Next Generation. I also loved the plot writing. My favorite episode is Timeless, in which Harry Kim attempts to re-write history to correct a mistake he made.

I did not have many friends who shared my views on Star Trek. Most of them were Star Wars people. The few 'Trekkie' friends I have had either never watched Voyager or hated it, so I was constantly defending it. I heard things like, "You watch the show with the woman captain? She's so stupid." Or, "I only watch The Original Series, all the other shows are just about sex and shooting things."

Star Trek, for me, represented a world in which endless exploration was possible, and almost always (at least on screen) produced some kind of interesting result. I have always been interested in space, and Voyager was a show where being lost in space looked like fun. It always represented an escape, another world that was there to sit in on. There was something in it that characterized security: the crew always had their goal of getting home. No matter what was going on in real life, matters for the Voyager crew were simple, they had to get home. Somehow that made real-world problems seem less intimidating.

Before this class, Star Trek was, to me, a really good story. I was my favorite science fiction, and I thought people added some science in there to make it sound more real. After all I have learned this semester, however, I realize that Star Trek in many ways is representative of the technological advances of the later half 20<sup>th</sup> century. Science seeks to emulate Star Trek, and in many devices has succeeded. It has inspired us to go further, and to better ourselves, in spite of the challenges. The driving theory behind Star Trek, that humanity ought to explore its surroundings, has infected us all, and we are driven forward, even when it looks like there is nothing more to know. This is Star Trek's greatest contribution, and makes it the most important fiction written this century.

#### **4. Female, Age: 21 years**

I have been watching Star Trek ever since The Next Generation premiered in 1987. Since then I have watched every episode when it first aired and many times after as they were re-run. It was difficult and sad to learn that there was not going to be another Star Trek series after Enterprise. For me, Star Trek was something that I could always count on. I am an Army brat and every couple of years I had to move and start a new life. However, having Star Trek really made things easier because I always knew that no matter what danger or peril the crew of The Enterprise, DS9, or Voyager was in, they would always save the day and things would become normal again. That is the appeal of Star Trek; it is consistent and something that you can always count on. The heroes will always win and come out on top, justice will be served, and someone learns about what it means to be human.

Outside of those in the Star Trek class, the rest of my friends are non-trekkies. I have not yet attended a convention or been to the Star Trek Experience. But, I plan on going to both once I have the means and time to. In the mean time, I am waiting patiently for the new movie to come out in theater. I have seen every single movie that has come out a multitude of times and I even saw Nemesis in theaters when it first came out. Naturally, Nemesis is so far my

favorite movie. It shows that even an Artificial Intelligence can become human and like any tragic hero once he/she comes full circle or accomplishes some almost impossible feat he/she dies a hero's death.

With a franchise like Star Trek it's hard to have an all time favorite series, episode, or character. However, for me, my favorite characters are Q, Data, Jadzia Dax, Seven of Nine, and Dr. McCoy. However, if I have to choose I would have to say that Q is my all time favorite. He works well for any Star Trek episode. Even though he is some upper level being he cannot even grasp the meaning of humanity and always seems to get everyone else mixed up in his trouble and still does not understand what humanity is all about.

My favorite actor has to be Brent Spiner; he took one of the most complex characters in the entire Star Trek universe and made him into something tangential. Brent Spiner made Data into someone that anyone could understand and relate to. It also helps that Brent Spiner can really sing and dance and those qualities add so many more dimensions to Data. The same goes for Robert Picardo and Jerri Ryan. These two very talented actors add the human side to characters that by tradition only had one dimension at best.

My favorite episodes are the final episodes of The Next Generation, Deep Space 9, Voyager, and Enterprise because they completely wrapped up the series in a nice neat bow and left no cliff hangers or unanswered questions unlike typical season finales, which left huge cliff hangers and you had to wait three plus months to see what happens or how it ends. The beauty that Star Trek offers is that each of the series easily weaved in and out of each other and you could easily use characters from the other series in any particular series.

Through the class I have learned that most of the magic of Star Trek cannot happen with our current level of technology and our understanding of the Universe. However that is the true beauty of Star Trek, take something that is purely Science Fiction and work at it to make it into Science Fact. I just hope that one day everything that is true about the Star Trek Universe is true in our Universe and that someday, humanity will know the meaning of prejudice, hate, or ill will towards the common man.

## **5. Male, Age: 21 years**

With my father being a fan of the classic Star Trek starring William Shatner, he was quick to introduce my older brother and I to the Trek world. By the time I was almost five, I watched my first episode of Star Trek: The Next Generation. Being so young, I had little idea of what was going on but remember being fascinated by the lasers and lights. I did however have many toys ranging from models of the various Enterprises and other Star Trek ships to action figures of characters such as the Klingon Worf and Geordi La Forge. By the time I was about eight or nine years old, I was a huge fan of collecting basketball cards with my friends. I still remember walking into collectors stores where they sold basketball cards and seeing life size cutouts of Star Trek characters from The Next Generation, Deep Space Nine, and Voyager. I

specifically remember cutouts of Captain Picard from TNG and Captain Janeway from Voyager as well as the always popular 7 of 9 cutouts, also from Voyager. By the time I was about eleven or twelve, I remember becoming very interested in Star Trek: Voyager and the newer movies starring members from The Next Generation. I was always a huge fan of Captain Jean Luc Picard who was played by Patrick Stewart. He is a great actor and has done a great job with characters such as Picard and Professor X in the X-Men movies. In movies like Star Trek: Generations with the Nexus region and First Contact with the Borg, Captain Picard is always portrayed as the always valiant but ever cautious captain of the Enterprise. Growing older, I lost touch with Star Trek, becoming interested with aspects of actual history such as World War II and The Civil War. I did notice a show called Enterprise starting up but I didn't take very much interest to it. It wasn't until I was almost a senior in college that my interest was sparked again. At the end of my junior year, I noticed ads for this class, The Physics of Star Trek. About to become a senior and being a biology major, I was drawn by the ad, especially when it said "4000 level credit", "fun!", "no prerequisites" and "all majors welcome!" Actually learning about aspects of the show that I used to know about such as holodecks, photons, phasers, and transporters has gotten me very enlightened again about the entire series. I am definitely looking forward to the movie coming out next summer as well. Also, having taken two physics courses prior to this class, I was never very interested in physics until now. It's almost as if for the first time, I have noticed physics come alive, so to speak. Seeing how Star Trek has influenced many aspects of technology we have seen today has sparked my interest in technological factors and gadgets as well. That Gene Roddenberry man sure knew what he was talking about! I also would like to someday go to a Star Trek convention as I feel it would be neat to see many characters I grew up with as well as maybe impress some Trekkies with what I have learned in this class. I can honestly say that my imagination was wider and more dynamic because of the Star Trek universe. I am grateful to have seen aspects of Star Trek and I definitely look forward to seeing in my lifetime other aspects of technology fall in line with Star Trek aspects seen prior. I know Star Trek is here to stay and I know it will be a world that I introduce to my children as well, as my father did with me.

## **6. Female, Age: 22 years**

When I first walked into my Physics of Star Trek Class this August, I found myself feeling incredibly intimidated, like I was walking into something I had no prior exposure to. Many of the students were avid fans and loyal followers of the series, or physics majors interested in gaining some out-of-the-ordinary elective hours towards their major. I took my seat realizing I was neither one, and anticipated to be either enlightened or horrified during the first lecture.

To my delight, I had chosen a seat next to some classmates suffering the same internal conflict I was experiencing. After engaging in some brief conversation with my classmates,

one student in particular convinced himself that this class would prove to be too overwhelming. However, I, along with the students sitting at my table were able to negotiate and encourage him to take Physics of Star Trek as an opportunity for educational advancement; and I promised to let him use my graphing calculator if need be.

The first couple of lectures were humbling to say the least. With the help of Professor Zitt's immaculate PowerPoint presentations, I was soon able to recognize that my former high school physics background was of little or no use what so ever. However, I refused to let what Prof. Zitt labeled "easy physics problems" discourage me into believing I was incompetent. Thankfully, we soon moved onto group presentations, where students were given the opportunity to pick a Star Trek related topic of his or her choice. The various topics covered by the students ranged from phasers to synthetic gravity to transporters to cloaking devices. I soon took interest to these terms and began research of my own for my upcoming presentation.

I went to the San Antonio library and checked out various books and DVDs on the weaponry, counter-culture, and technology related to the Star Trek series. My friends noticed me reading or doing homework related to Star Trek, and began asking questions regarding my sudden interest in the series. After multiple cross-examinations, I took note of the some of the questions I was most frequently asked: "Since when do you watch Star Trek?", or "I didn't know you were a 'Trekkie' Desi", or they would refer to some infamous quote like "Beam me up, Scotty."

My response to these interrogations was always similar, "Well, what are you interested in?" One of the things that I came to appreciate after taking this course was that yes, there was a loyal Star Trek following and hundreds of publications have been written in regards to the series. People could choose to see the Star Trek culture through whatever lens they chose, but unless they were actually exposed or somewhat educated on the topic then they really had no foundation on which to criticize. People like the show for whatever reason they relate to, and shouldn't have to habitually defend it to anyone.

Interestingly enough, my friends that initially criticized my new-found interest in the show began to show curiosity themselves. I recently went to a movie with a couple of friends from high school. The lights dimmed as the previews began, and I realized that I would soon have to excuse myself to use the restroom before the show started. I got out of my seat and hurried to the exit when I was stopped short by the work Kirk spoken in one of the previews. I immediately froze and faced the screen to see the face of the young Captain Kirk. I instantaneously took the closest seat to watch the remainder of the preview. When I came back to my seat I was greeted with excitement in anticipation of the upcoming movie, along with premature arrangements to buy tickets. My girlfriends asked me too many questions at once. "Isn't Captain Kirk HOT?!?" or "Wait, I thought Spock was a good guy?" or "Desi did you just see the preview for the new Star Trek movie?" This would have been an excellent time to come up with something clever or witty, but I didn't want to taint their sudden enthusiasm. Instead, I encouraged it by promising to make arrangements with them.

Even though the semester is coming to an end, I still plan on making visits to the library to rent more seasons of the show and will of course watch the movie with my girlfriends. Some of them have even asked to borrow materials on the show.

After presenting my topic last week on the “Cultural Approach” to the Star Trek series, I have really come to appreciate what I have learned through my research. I know it’s just the tip of the iceberg, and there is so much more to learn. But that is what makes an education worth while. I will continue to recommend this class to anyone even after I graduate. May we all “Live long and prosper.”

## **7. Male, Age: 21 years**

Captain’s Log: My first endeavor into the unknown world of Star Trek and the journeys of the Star Trek Enterprise crew. I have never seen Star Trek before this class, and still have not seen a full episode since the start of the semester. I predicted that this class was going to be an easy grade and I wouldn’t have to work very hard. I was taught the contrary. There was a lot of information that I learned and concepts that I never thought about.

I took a physics class previously before this class, so I knew the basic formulas that were used during the class. However, the concepts that went along with the class were new to me. The one concept that challenged me in particular was the time warp drive section. I never knew the complexities of string theory, wormholes, and warp fields. Warp fields are an entirely new concept to me. Learning this helped me better appreciate the show and its realistic concepts in science and technology.

My presentation also helped me better understand the passion that comes from the fans of Star Trek. As I was gathering information for my presentation, there was a plethora of information and I kept finding more and more. I was finding lots of information and started liking the ideas that went along with it. It got me interested into maybe watching some of the episodes in the future. There is great scientific evidence, concepts, and theories that are behind the episodes. It gave me a newfound idea of what Star Trek is. I always thought Star Trek was like Star Wars and that it was total fantasy. I have a better appreciation for the science and thought that went into the series. I also like the fact that it was cutting edge as far as societal trends. The first interracial kiss and the first multi-cultural cast on television are great steps in television history. It predicted societal roles and ethnicity that had not been touched before. It showed to the extent that people would be accepting of other cultures before it was even thought.

Overall, this class helped me see Star Trek from a new perspective. It gave me deeper insight to the background to the culture of Star Trek and the passion that goes along with it. It gave me tools to spread information to other people that may not know the science behind Star Trek.



## **8. Female, Age: 20 years**

My first experience with Star Trek would have been with the series *The Next Generation*. As a child, instead of being allowed to watch regular TV, my parents always had me watch public broadcasting which, during certain times of the day, played educational programming (the standard learning to read, rudimentary math, etc.). So for a time as a kid I watched this one show called *Reading Rainbow*. This program detailed picture books, both new and old, sometimes giving summaries and at others reading stories with certain dramatizations of the illustrations. One particularly interesting thing about this show was that the host often went to places such as farms or art workshops and so the stories chosen generally had something in common with the chosen location for that episode. As a kid who had an affection for books and reading, *Reading Rainbow* came to have a place in my affections, not only because of the stories, but also due to the interesting possibilities the different themes and locations inspired (I still remember an episode in which an artist was featured who made wire sculptures that he hung from trees, needless to say, several hangers were mangled by the end of that week).

By the time I had outgrown *Reading Rainbow*, however, I had acquired a taste for adventure stories of all sorts. Naturally, what could be a bigger adventure than traveling in space? Now that I was old enough to flip through channels on my own on occasion, I would gladly pause on shows which I thought looked promising. Imagine my surprise when one day I came across the host of the show I used to watch on the bridge of the *USS Enterprise*! Interestingly enough, the visor wearing Geordi La Forge was the same LeVar Burton that I used to be familiar with as the host of *Reading Rainbow*. This made me pause, curious about this odd new connection; it was even interesting to me, who had recently been prescribed glasses, that this very same character also had the unfortunate malady to need his vision corrected. In retrospect, these were very odd motivations for becoming interested in a TV show, but remember, I also had the added draw of aliens and spacecraft to keep me entertained as well. The further sense of familiarity I gained by feeling like I already 'knew' one of the characters only further encouraged me to explore this new world of transporters, tricorders, and travel faster than light. And so, quite unwittingly, I became enthralled with the Star Trek universe.

## **9. Male, Age: 21 years**

The first time I watched Star Trek was actually the movies. My parents bought me the original movies when I was six or seven I think. In all honesty, I really was not into it at first; it was my exposure to *Star Trek: The Next Generation* that really peaked my interest in Star Trek. I remember one of the first episodes I saw on 10 p.m. on channel 35 was "Heart of Glory", it was very interesting seeing Worf fight some of his "people" onboard the *Enterprise*. I thought the Klingons were very creative concealing weapons as part of their shoes or belt buckle and combining it to make a disrupter, bravo. Another of my favorite

episodes is the first Borg encounter titled "Q Who?" It was a good episode due to the desperate situation of the crew when the Borg start to slice through their shield and about to finish them off, when out of nowhere Q comes and flicks the Enterprise out of harms way because Picard admitted that he needed Q's help. From those episodes on I was hooked, and when I found out that UIW was offering a course called "The Physics of Star Trek", I wanted in. I figured, "Ok, it's about Star Trek so I should like it, hopefully we get to see some episodes." More or less I was not disappointed, we did watch some episode clips on Star Trek, actually most of the Star Treks, even Enterprise. I quickly learned about the physics side of Star Trek; about how if a transporter was built using today's equipment, the data storage on 100 gigabyte drives would stack up to 0.1 light years. If we were to try to transmit that data at a rate of 1 gigabyte per sec, the transmission time would take 3.1 trillion years or roughly 170 times the estimated age of the universe, ouch. So no beaming for the time being, or technology needs to shape some more before we try something as ambitious as that, however holographic technology is a very good possibility in our lifetime though, so yea for the future! ☺

All in all, it has been fun, yes it was hard for me as well, but I did enjoy the time I had in the class. I wish I had some time with the classes, because I probably would learn some more interesting Star trek related material and I could boost my grade some more, he-he. I'll miss hearing the iconic score of Star Trek playing before our presentations, the funny unexplained moments in Star Trek, the mishaps of future technology, but it's been real. If I could rewind back to the day I signed up for the class, I probably would have made the same choice anyway because I would have never learned so much about Star Trek or made some new friends among some Trekkers. Yes I proudly admit I am a Trekker, my only regret as a Trekker is not being able to go to Star Trek: The Experience, before it was decommissioned in September of 08. Another regret I have, as a student, is not doing as well as I had hoped in the class, but hopefully I'll do well on presentation and get a B as a final grade for the class. ☺

## **10. Female, Age: 26 years**

This class has been very interesting to me. I have learned a lot about how physics can be related to even the movies, shows, and other entertainments that interest me. Star Trek physics would have never crossed my mind had it not been for this class. I very much enjoyed the lectures on inaccuracies in the Star Trek series, as well as those done by students on things like space travel and time travel. I would enjoy greatly a lecture on the holodeck, but I am unsure if it is being covered by any students before the completion of the semester. From here on, I will be watching Star Trek in a different manner. I was amazed at the inaccuracies that can be found in the series and about the mistakes that have to do with physics, math, and other scientific explanations. I will now enjoy looking for mistakes in the series' that have to do with physics formulas and such.

One interesting aspect of "beaming people up" is the fact that although theoretically, one day we may have the technology to transport, it is unlikely that we will ever have a successful beaming of intelligent life forms, namely, humans. It is interesting that you may be able to beam physical matter, but how would a person's psyche, soul, or spirit ever be able to be transported if it cannot be harnessed or physically detected in any other way? This is a very intriguing concept that came up slightly during class, but which I would like to hear more of...

Another thing that made this class more interesting was the many video clips and sound bytes that we were able to review in class. I thought the lecture about communications and devices that can translate all languages was extremely interesting. The Klingon Christmas carol we heard before class also was quite funny.

I have enjoyed watching Star Trek since I was little. My parents loved watching Captain Kirk and the original Enterprise series. Every night we would gather and watch it. Even now, when I go home to my parent's home, my dad watches Captain Kirk on the late night TV shows, and it is funny to watch the reruns and remember seeing them when I was little. I remember watching the Star Trek movies when I was small also. The one about the time travel to rescue humpback whales was my favorite. I like when Scotty is trying to get the computer to respond to him by talking to it, which is what he is used to in the future onboard the Starship Enterprise. Computer technology surely has come a long way since then!

## **11. Male, Age: 22 years**

For as long as I can remember I have heard somewhere or someone talking about Star Trek. I personally don't consider myself a trekkie or trekker and have not seen all the episodes or movies. I don't have a large extensive background on Star Trek but I have learned through this class to appreciate its interest and science in Star Trek. I cannot say that I have never seen an episode or ever been intrigued by the show though.

I growing up never had cable television or satellite. I only had the basic channels to watch and one of my favorite shows to watch was Star Trek: The Next Generation. Though I used to watch it almost religiously I never really got a chance to watch anything more than some reruns and mixed episodes. I never really got a chance to watch the episodes in order and haven't seen all of the episodes.

I would have to say that my favorite series is Star Trek: The Next Generation just because of the fact that I haven't really gotten a chance to watch the other series. I have watched a few episodes here and there on some of the other series but my favorite would have to be The Next Generation because I have gotten a chance to know more of the story line in this series.

I do have a couple of trekkers as friends. My friends have everything from posters to full size models that they have bought or made of some of the characters in the series. They have always tried to turn me into some type of trekker but so far they have tried with no success. I usually just tell them that I like Star Trek but not the extreme that they sometimes go into. I have heard many of the things that are discussed in class from them in different occasions. For example, they used to tell me all the time that Star Trek had invented the cell phone and other gadgets that we have now. I never really paid much attention to them but after taking this class and making some closer observations in the series I now know where they were coming from. I have also been amazed with how many facts and how accurate the Star Trek series have been for the most part.

I think that Star Trek is a true science fiction show to its full meaning. There are a lot of facts in the series that have really intrigued me in many ways. The facts as well as the story line have made me find interest once again in Star Trek and made me want to go back and watch the series from the very first to the last episode of all the series. After taking this class I know that I will for sure have a new perspective on the series and as I watch it I will be thinking of all the physics related aspects of the show.

## **12. Female, Age: 17 years**

I have been watching Star Trek since I was a little child. My dad and uncle are die hard Trekkies and love watching the show. My first words might as well have been "Live long, and prosper" because we watched the show so much, and greatly enjoyed the movies. I know I was definitely in love with captain Kirk and Spock. They were the lead roles for a great reason. I would stay up till all hours of the night watching the old Star Trek movies, especially The Search for Spock and The Voyage Home. My father still has fond memories of me copying phrases from the monumental movies. I have always wanted to go to a Star Trek convention, but have never been able to. I don't think they've ever held one in San Antonio or the surrounding area otherwise I'm sure I would have visited one by now. Star Trek has definitely been a great excuse for me and my father to bond, because we both greatly enjoy it.

I had just started drifting away from the subject of Star Trek and thought it was in the past when this class started, and started the passion right back up again. I have learned a lot about Star Trek and noticed things I had previously overlooked. I greatly enjoy this topic we have been going over and discussing the past few months we've been in class. Now when I watch the show I can get more into it and have fun with it like I was never able to do before. It also helps that I'm much older now than I was when I first started watching the show, I get more now than I did then.

I have definitely had fun with Star Trek and would thank the creators if I could. One of these days I WILL meet William Shatner and Leonard Nimoy. They are some of my favorite actors

and would love to see them in a new adventure, however due to time they cannot and we can only hope the new actors being used in the new movies and shows will do them justice.

### **13. Male, Age: 24 years**

Star Trek for me has always been a show that was of moderate interest to me for several reasons. The first and primary would be that of the science component and sense of action adventure. As for the culture that surrounds Star Trek, I have always remained reserved for those “people”. I had always seen “trekkies” as nerds or people that I would not want to be around.

Initially, my first experience with Star Trek was with my father. I was a child at the age of seven or nine. This was the original series with William Shatner and I took to it very well. I guess the attraction was the element of aliens; I always enjoyed the adventures that they embarked on. The idea that every time I tuned in I always knew that I would be about to witness a foreign planet with strange flora and fauna. This always reminded me of movies like Lord of the Flies. The show also gave me and my father a time to hang out and discuss the action; and hoping that Star Trek would not be doomed.

As far as the culture of Star Trek goes I have never met one or have had any desire to go to a convention of any sorts, however. Now with the experience of this class I have a new found respect for the series and the people that embody this arena. I realize now that there is much more that goes on with regards to the series. This comes from the true and genuine study behind the scenes that goes into developing and maintaining the show. The science behind the mechanics and technology of the show are sound. Further, I have discovered that the philosophy of the show such as the literature surrounding the show is well constructed. The series is really trying to make an attempt of creating a real government of interplanetary planets. The series has a constitution and charter, with laws and orders that govern citizens and Starfleet actions. Upon research I have had a profoundly strengthen appreciation for the series, especially the science and philosophy that are involved. I can be said that this is not so much a fantasy, because the concepts stem from real technologies and the social issues that we witness here on Earth. I feel very happy to have taken this course and I will carry this experience with me for life, I have once again been taught the benefits of appreciating the “Other”. Things that I do not know about and should give a chance.

### **14. Female, Age: 22 years**

I remember Star Trek from when I was a child, it was from my father being an avid fan and he would watch them on TV. It became “Dad and his Star Shows,” because he’d watch Star Wars too. I didn’t really watch it, but what I did watch interested me at the time. Geordie

was the character I always remembered, but that might have to do with the actor playing a role in Reading Rainbow.

Later on in my life I had a friend whose entire family was composed of trekkies. They had figurines and video sets of the episodes, and would watch it on TV sometimes when I came over. Once they took me to watch a Star Trek movie that had just come out. I don't remember what movie it was; the only thing I remember about the movie is that Data was a floating head on some remote planet.

I moved on after a while, and hardly knew anything about Star Trek except for the fact that I did like it. I was in Las Vegas during the time that the Star Trek experience was there, but as we weren't there for that, we didn't get to see it. My brother and I were alone riding the monorail a million times while my mother was in a conference, and we kept passing the hotel that had it. I was half tempted, but I didn't want to have to buy more monorail tickets, and I had no idea if we were going to have to pay to check it out. I did take a photo of the sign however! And we saw plenty of people walking around in Star Trek uniforms. I was jealous; I wanted to be the crazy person everyone laughs at dressed up as a trekkie and just enjoying life no matter what anybody said. The monorail speaker said something like "Don't be surprised if you are on the train with a Klingon!" We were riding it mostly to see if we could find one, but nobody dressed as one ever showed up. Oh well.

Sometimes when I'm in the online virtual world of Second Life, I like to check out the Star Trek "islands" and wander around inside the ships. Especially when I get to sit in the captain's seat. There are many roleplay's and areas you can explore that are Star Trek related, and many things you can buy. It's amazing to see Star Trek "come to life" in the virtual world.

I may not know much about Star Trek still, but this class has taught me much I wished to know. I like the series, I like the concept, I love the technologies and the characters and I watch Star Trek when I get a chance to see it. Somewhere at home I own a little Star Trek badge that talks when you press it that I bought at a store many years ago. A little bit of me lives in that Star Trek universe, and I hope I can live to see many more of its technologies in the real world.

## **15. Male, Age: 21 years**

Growing up, I had never really watched much of the iconic show that is Star Trek. I had family who had really been into it scheduling it into their schedules, in order to watch it and record it on our VHS. One of those people who was really into it, and that tried to get me more interested in it, was my father. My father and I had never really been too close. Knowing this, we attempted to "hang out" and spend more time together. He had been diagnosed with an illness in February of 2008, and I started to watch Star Trek with him in order to spend more time together. My father and I never really had much in common so

finding something that we both liked was a hard enough challenge. Last April, as I was signing up for senior classes this semester, I was told that we had just recently added a class called Physics of Star Trek, I am a Senior biology major and hearing this I thought “ this could help me and my father reconnect, plus I like science and math”. I started to watch Star Trek episodes on the TV, mainly the newer episodes of Enterprise, and spending more time with my father. I began to find it more and more interesting, talking to neighbors and friends who I knew liked it. I also began to realize that a lot of people that I thought did not seem intrigued by it were actually very interested in it. Now it wasn’t just my dad and I watching together. it became more of a family thing. As the first day of classes for the semester began I was excited to see what I would learn and what this class would consist of. I had always watched Star Trek, and being fairly new to it, I knew I had much to learn. Something I found interesting was how the episodes in Star Trek dealt with issues that were going on in the world. “Let That Be Your Last Battlefield” is an episode in Star Trek that dealt with race it was released in the late 1960s and early 1970s where race was a prominent issue in the world. I also didn’t realize how much technology has evolved and how much of today’s technology looks like the technology from early Star Trek episodes. I wouldn’t call myself a die-hard Star Trek fan, but I do have a new love for it and a new relationship with my father. My family and I plan on attending a conference someday soon. This is my story, this is my own Star Trek story.

## **16. Female, Age: ?? years**

The day I first saw Star Trek I was about ten years old, I have an older brother who fell in love with the next generation season. And being the annoying little sister I watched every episode and when my brother moved out I was given all of his Star Trek stuff book, figurines and tapes. I have watched mostly every episode but I never thought I would look at the science of it and I actually don’t really like it. However I have kept an open mind but what I’ve researched for my paper is awesome. The idea that there is philosophy in the sci-fi series is awesome and the idea of an ideal humanity is extreme but totally achievable.

When I was growing up my favorite character was Commander Riker and Deanna Troi. Riker was so handsome and Deanna Troi I always thought could be me. And when there was a romantic relationship between them I loved star trek even more.

I have a lot of trekkies in my family my brother, younger cousins, but I’m the only girl who would watch the series with them. I just like how everyone is together at the end of every series the happy ending is everyday and humanity is safe.

## **17. Male, Age: 21 years**

The first time that I saw Star Trek was when I was a young child and was flipping through channels. I stopped because I thought it was a different TV show. It was about half way through the show and I can't really remember what it was about but it was my first encounter of Star Trek. After I was this episode I wouldn't say I watched it on a regular basis however if I were home and bored I would watch it and get into watching it.

I don't have any close friends that are trekkers they are mainly into mainstream things, like comic books. However I have a coworker that's very much into Star Trek, he dresses up as a different character from Star Trek each Halloween. He goes to Star Trek conventions and invites me but I never go either because I am working or have made other plans. He is into LARPing and involves Star Trek into that as well.

My favorite Star Trek episode has to be "Trouble with Tribbles". My reason for liking this episode is because it covers many things, like foreshadowing and discusses history. I love reading books with both those things. I like history for the fact that if someone does not know where they come from then they cannot know where they are going. History plays an important role in my life and I love to learn from the past so I don't make the same mistakes and if things are recorded correctly like it eludes in this episode then people cannot know the truth. For example things that Russia discovers that have not been recorded into history books.

My favorite character is Tasha. I like her character because she is second in command and I think that people second in command always have to work harder than those in command.

After being in this class it has opened my eyes to see that there is more to things within these episodes than what I first conveyed. At first glance I thought everything that was being said was made up and no meaning behind it. Now I know that there is meaning and that things from the seventies are now a part of today's society, such as Bluetooth headsets and touch screen computers. Like I alluded to before history is an important to me and know where things came from are very important and those ideas for Bluetooth and touch screen came from Star Trek.

## **18. Female, Age: 28 years**

The first time that I have really seen Star Trek was probably when I first met my fiancée. He is really into Science fiction, and I'm into it as well, but never really started seeing episodes before him. He and I would just watch the episodes that would come on late at night, and I really enjoyed it. I started seeing Star Trek in a different way though since I had this class. The reasons are many. Well, for one, I got to actually communicate with other people other than one person that liked Star Trek, so that opened my eyes a bit. I really liked the classes that we had when there were discrepancies in Star Trek, as far as dates and such. I thought



that was quite funny. I also liked the episodes where they would have Einstein in there. I also liked when we would do the equations in class that would have to do with Star Trek and space. I can't say that I have a favorite actor or actress, but I did like when you taught us about how the first kiss scene was a huge ordeal. I remember that episode because we all laughed in the class for it being so short. As far as my outlook on Star Trek now I'd have to say that in the past I never really gave it much thought or whenever I would turn the channel and see it I would just change it, but now that I have learned more about the history of it, and have actually experienced some of the episodes, I have to say that I really like it. Star Trek is very interesting in the aspect of how most or at least some of the technology today was first seen on Star Trek. I think that the cell phone and the communicator are so much the same, and that is so odd how it was first seen on Star Trek, and thought up by the techs, rather than Motorola or some big company. I have also been telling my friends and family about the class, and the different things that I have learned, and now my sister sees Star Trek, when she never would have given in another thought! It's just such an interesting show due to the humor and mainly because of the technology that is seen today in there. I would definitely have to say that I will watch Star Trek more now because of this class, and that I have learned a lot from this class not only about Star Trek, but about technology.