Digital Radio Hardware Design Course Survey Results

This document gives the results of a survey taken on the 13'th week of the course. Respondants were presented with several statements and asked to circle a number between 1 and 5 with 1 being "strongly disagree", 3 being "neutral", and 5 being "strongly agree". Space was also given after each question for elaboration.

For easier interpretation, the 1 to 5 scale was converted - when tabulating the results - to a -2 to 2 scale, with -2 corresponding to "strongly disagree" and 2 corresponding to "strongly agree".

The results shown below give the average, low, high, and standard deviation of the responses. Comments provided by respondants are given after each question. The number in parenthesis after the comment is the score given on that question by that respondant. General comments on the course and recommended improvements are given at the end.

	Avg L	ow l	High	Stddev
My level of effort in this course (total hours spent) is more than in other couses I am taking.	1.5	1	2	0.5

- [I am a] grad student.(1)
- This class is very time consuming, but well worth it.(2)
- Well worth the time.(2)
- This is mainly because it is more interesting than other class[es].(1)
- I want to spend more time in this class because the topics interest me. I've also learned more.(2)

The goals and structure in this class are substantially different 1.5 -1 2 0.8 than that in other courses I have taken.

- I took a design class last semester and spent even more time on it than this class.(-1)
- However, working towards a final project goal is better and more motivational than a standard syllabus.(2)

The time spent on this course has been more valuable than 1.5 0 that spent on more traditionally structured courses.

• I have learned more in this class not only about EE, but about how companies work and about teamwork.(2)

0.6

2

• Damn skippy!(2)

Recruiters have responded positively to the fact that I am taking this course. (Leave blank if not applicable.)	1.4	-1	2	1.0
 We talked about it in every interview I had.(2) Almost every recruiter has asked me about the project.(2) 				
This course has helped me understand the teamwork needed in modern product design.	1.8	1	2	0.4
 A little bit.(1) The inter-team teamwork was something new, but very valuable in e Recruiters also liked this aspect of the class.(2) 	xperienc	e.(2)	
The teamwork experience in this class has been substantially different than in other classes I have taken.	1.3	0	2	0.7
• My other teamwork experiences have been bad. This time even in tean dit worked well.(1)	eams, eve	eryo	ne h	ad a job
This course has helped improve my own teamwork skills.	1.2	0	2	0.7
I think the course goals are overly aggressive.	-0.3	-2	1	0.9
 Not really.(-1) They are aggressive, which is good, but this class takes up time that courses.(1) There is a lot of work to be done, but definitely achievable.(-2) I'll make my final decision after I see if it works.(1) "Challenging" is more of what I was thinking.(1) 	I should	spe	nd o	n other
I believe our company's product will be successful (with a minimum of debugging after it is built).	0.7	-1	2	1.1
• Ours will work.(2)				

• It's possible, but it's a long shot. There's so much that could go wrong. If we had time to prototype it and then make a final version, the product would have a much better chance.(-1)

Preparing and attending the Critical Design Reviews was helpful/useful.

1.4 0 2 0.7

- It helped me get my thoughts organized on the project.(0)
- It helped put everything together.(2)

Holding the CDRs during class time was appropriate.

1.2 -1 2 1.0

- I think that maybe team presentations could cut down presentation time and allow for more instruction time.(0)
- Need more time to pick at the designs.(-1)
- The ultimate goal is the working radio Best brought about by working on it in class.(2)

I would recommend this course, or one like it to my friends.

1.8 0 2 0.6

- Definitely.(2)
- It depends if we get the phone working. There's a great feeling of accomplishment that comes if it works.(0)
- It has been a worthwhile experience.(2)
- This is a great "real-world" experience involving the project.(2)

Your overall impression of the course:

- I have enjoyed the course thus far. It has been interesting and enjoyable.
- This course was extremely ambitious and challenging. It brought a lot of design and real world problems into the classroom and has benefitted me greatly.
- I truly enjoyed this course. I would almost be willing to take 2 courses on the subject such as a lab/project and a lecture.
- It is a very good course. Everything was very well prepared.
- Great course, great instructor, and great way of teaching.
- Impressed and satisfied. Got start-to-finish a project which I feel will work.
- It is interesting but not specifically in my EE option. I like design courses, but they are much more work than most courses. I'll have to see if we get it working before I make a final decision about the class.
- This course was an excellent learning experience.
- I think this is one of the best and most informative classes I've taken. The combination of class/company structure really makes clear what we are trying to accomplish. Overall this was a great experience and I learned a lot more than I normally care to learn. Most of the time I don't retain the lessons very well, but I kept a lot of the lessons in my head.
- Its a challenging, time consuming course, but hopefully we will have done something special in the end.

- I think this course is a great course. It shows the procedure needed for a team design project, which will be very helpful in the future.
- This is the best course I've taken at K-State. I feel I have gained very useful experience that will apply in a real job.
- I've learned a lot about teamwork and design from a system point of view. it was fun and because of that, I always looked forward to attending class.
- I loved it. A lot of work, but a lot of rewards if it works.
- I really enjoyed this course. It is a great way to gain some "experience" in RF/system design. The teamwork was especially enjoyable.

Ways the course could be improved:

- I do not have a very thourough understanding of the subjects covered by the other teams. I would like to know what problems they encountered and how they fixed them.
- Bring donuts to class. Make course two semester long?
- 1 collecting the materials being taught in one textbook, the student can use for the course.
 2- I would recommend teaching another course related to antenna and wave propagation at the undergrad level.
 3- Another course at undergrad/grad level on RF systems might be helpful.
- More company meetings.
- Possibly let the software people use code from previous, so they may have more time to implement additional features, such as keypad, etc. Eventually, connect this to actual phone line if possible/legal.
- Better communication amounst teams.
- I thought the course objective was to make a radio, so it seems that some lecture material was not relevant to that objective.
- The only problem that I couls see is the amount of time necessary to complete the team assignments. I am not taking many hours and I still felt there was a higher time demand in this class compared with any other class I have taken. I still enjoyed it!