

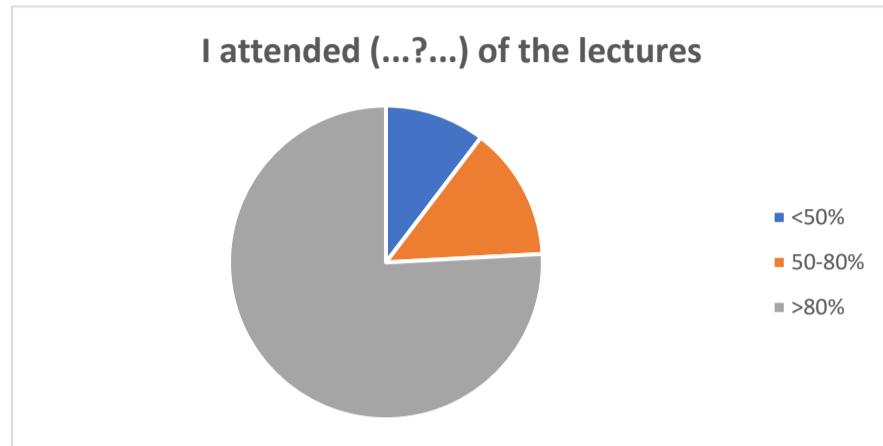
Survey Summary

PX3A3 Feedback 22/23

No. of Participants 29
 Survey Started 16 Nov 2022 10:04:40 GMT
 Survey Ended 21 Dec 2022 16:59:40 GMT

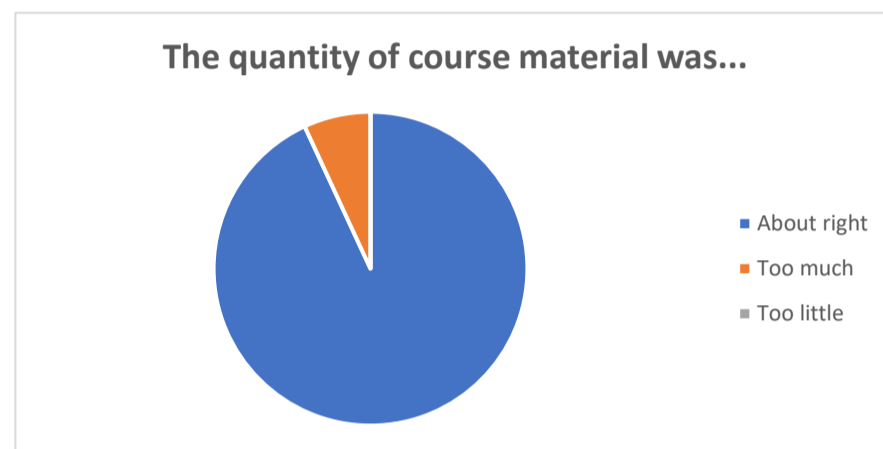
I attended (...?...) of the lectures

Question Type:	Multichoice		
Question #	1		
Allowed Responses:	1		
Participants:	29		
Choice:	Description	Responses	%
1	<50%	3	10.34
2	50-80%	4	13.79
3	>80%	22	75.86
	Total	29	



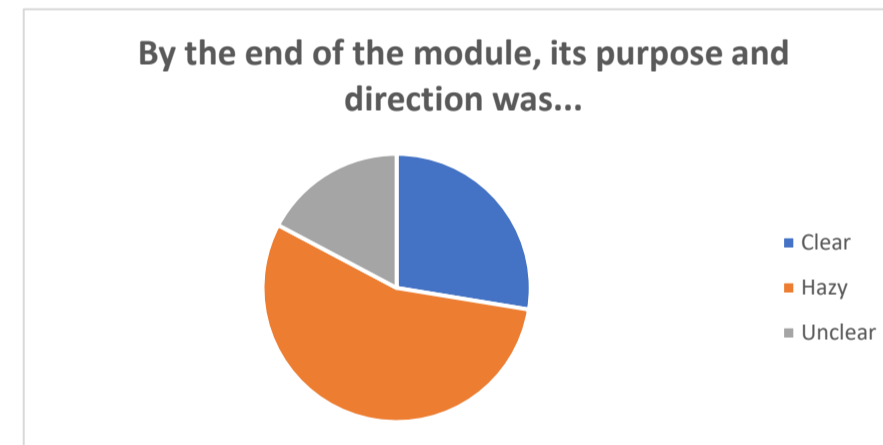
The quantity of course material was...

Question Type:	Multichoice		
Question #	2		
Allowed Responses:	1		
Participants:	29		
Choice:	Description	Responses	%
1	About right	27	93.10
2	Too much	2	6.90
3	Too little	0	0.00
	Total	29	



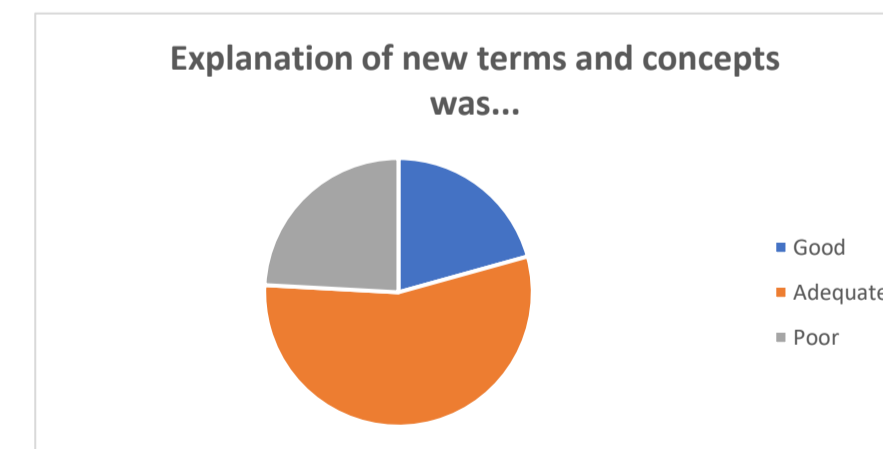
By the end of the module, its purpose and direction was...

Question Type:	Multichoice		
Question #	3		
Allowed Responses:	1		
Participants:	29		
Choice:	Description	Responses	%
1	Clear	8	27.59
2	Hazy	16	55.17
3	Unclear	5	17.24
	Total	29	



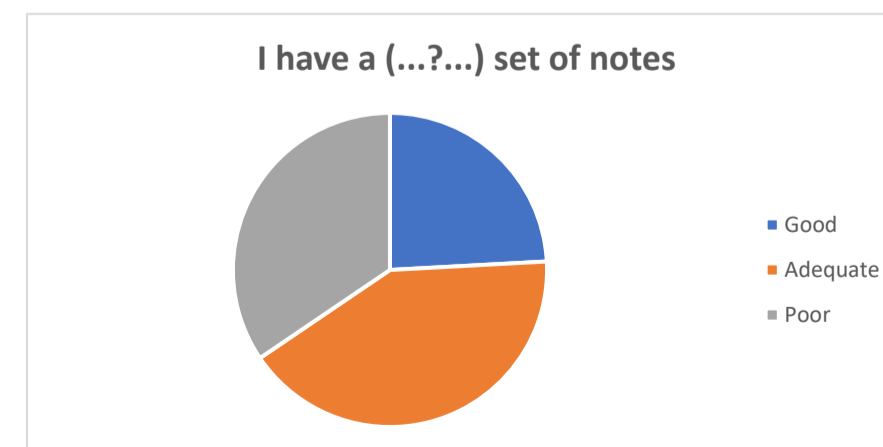
Explanation of new terms and concepts was...

Question Type:	Multichoice		
Question #	4		
Allowed Responses:	1		
Participants:	29		
Choice:	Description	Responses	%
1	Good	6	20.69
2	Adequate	16	55.17
3	Poor	7	24.14
	Total	29	



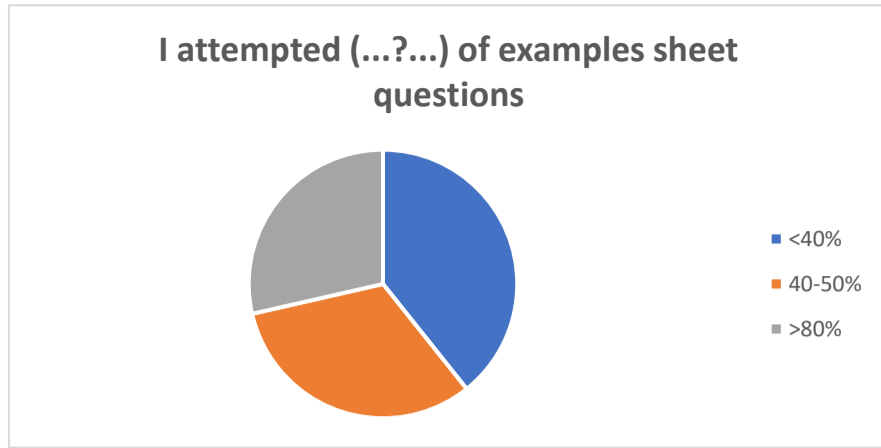
I have a (...?...) set of notes

Question Type:	Multichoice		
Question #	5		
Allowed Responses:	1		
Participants:	29		
Choice:	Description	Responses	%
1	Good	7	24.14
2	Adequate	12	41.38
3	Poor	10	34.48
	Total	29	



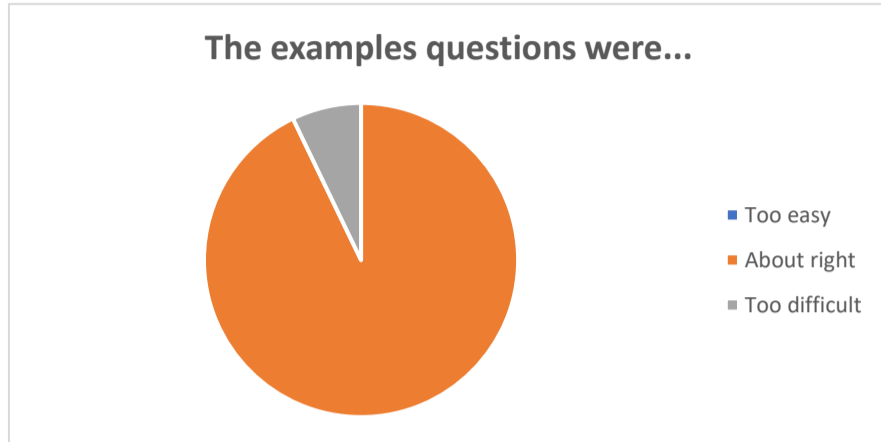
I attempted (...?...) of examples sheet questions

Question Type:	Multichoice		
Question #	6		
Allowed Responses:	1		
Participants:	28		
Choice:	Description	Responses	%
1	<40%	11	39.29
2	40-50%	9	32.14
3	>80%	8	28.57
	Total	28	



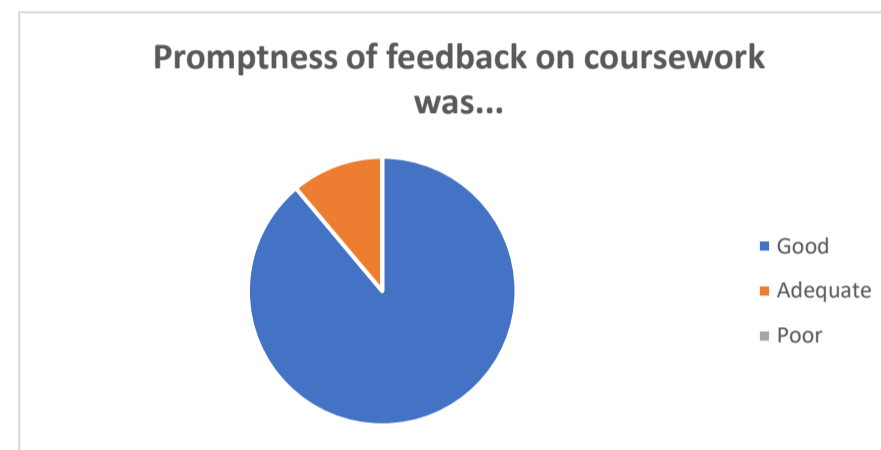
The examples questions were...

Question Type:	Multichoice		
Question #	7		
Allowed Responses:	1		
Participants:	28		
Choice:	Description	Responses	%
1	Too easy	0	0.00
2	About right	26	92.86
3	Too difficult	2	7.14
	Total	28	



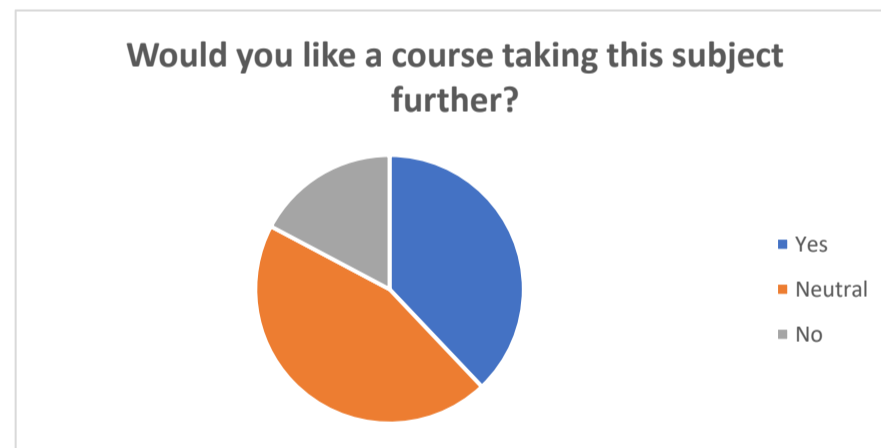
Promptness of feedback on coursework was...

Question Type:	Multichoice		
Question #	8		
Allowed Responses:	1		
Participants:	27		
Choice:	Description	Responses	%
1	Good	24	88.89
2	Adequate	3	11.11
3	Poor	0	0.00
	Total	27	



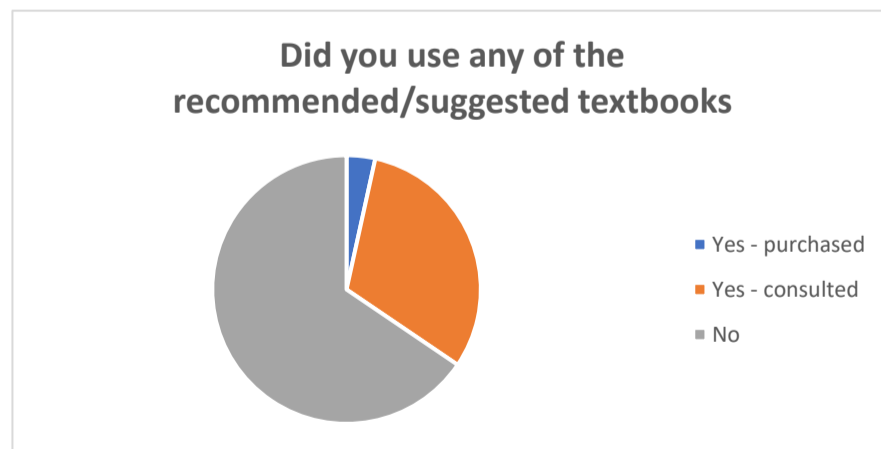
Would you like a course taking this subject further?

Question Type:	Multichoice		
Question #	9		
Allowed Responses:	1		
Participants:	29		
Choice:	Description	Responses	%
1	Yes	11	37.93
2	Neutral	13	44.83
3	No	5	17.24
	Total	29	



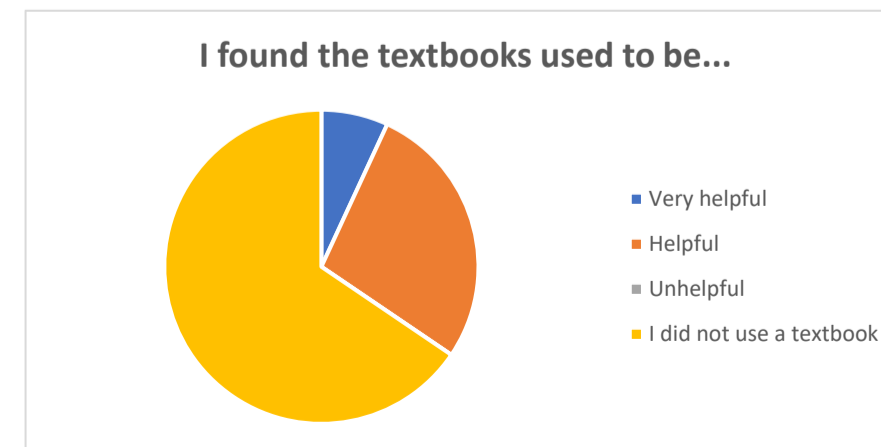
Did you use any of the recommended/suggested textbooks

Question Type:	Multichoice		
Question #	10		
Allowed Responses:	1		
Participants:	29		
Choice:	Description	Responses	%
1	Yes - purchased	1	3.45
2	Yes - consulted	9	31.03
3	No	19	65.52
	Total	29	



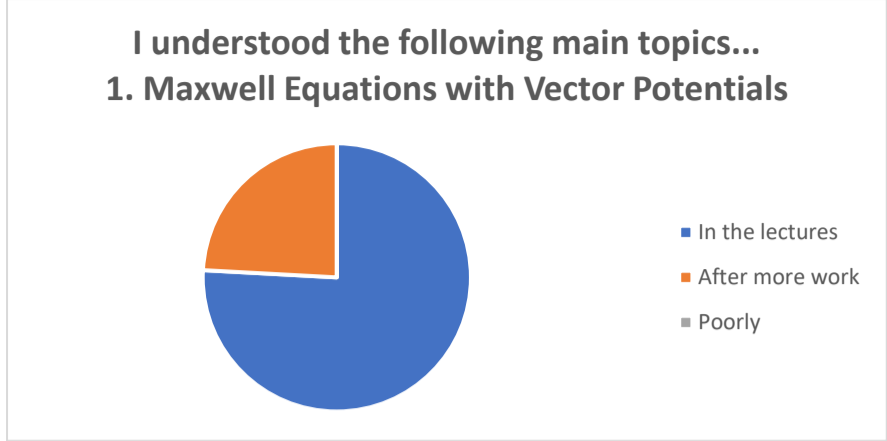
I found the textbooks used to be...

Question Type:	Multichoice		
Question #	11		
Allowed Responses:	1		
Participants:	29		
Choice:	Description	Responses	%
1	Very helpful	2	6.90
2	Helpful	8	27.59
3	Unhelpful	0	0.00
4	I did not use a textbook	19	65.52
	Total	29	



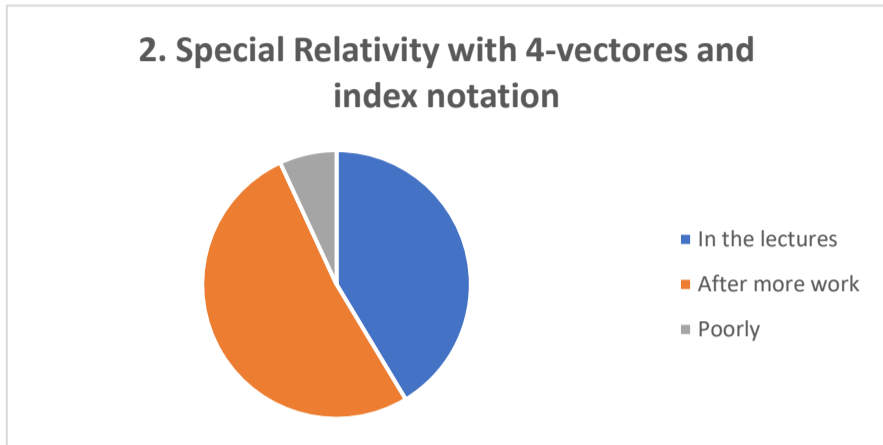
I understood the following main topics...1. Maxwell Equations with Vector Potentials

Question Type:	Multichoice		
Question #	12		
Allowed Responses:	1		
Participants:	29		
Choice:	Description	Responses	%
1	In the lectures	22	75.86
2	After more work	7	24.14
3	Poorly	0	0.00
	Total	29	



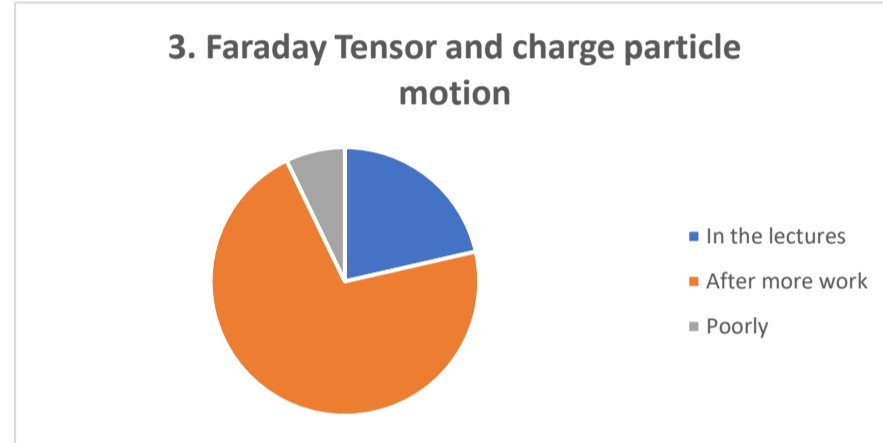
2. Special Relativity with 4-vectores and index notation

Question Type:	Multichoice		
Question #	13		
Allowed Responses:	1		
Participants:	29		
Choice:	Description	Responses	%
1	In the lectures	12	41.38
2	After more work	15	51.72
3	Poorly	2	6.90
	Total	29	



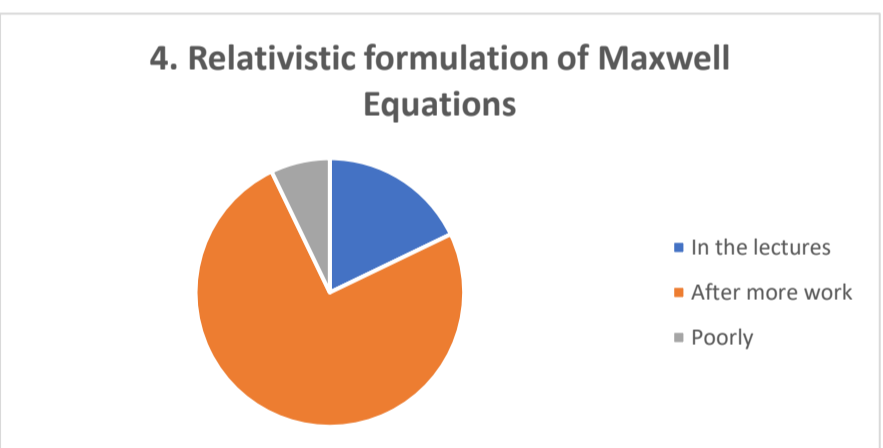
3. Faraday Tensor and charge particle motion

Question Type:	Multichoice		
Question #	14		
Allowed Responses:	1		
Participants:	28		
Choice:	Description	Responses	%
1	In the lectures	6	21.43
2	After more work	20	71.43
3	Poorly	2	7.14
	Total	28	



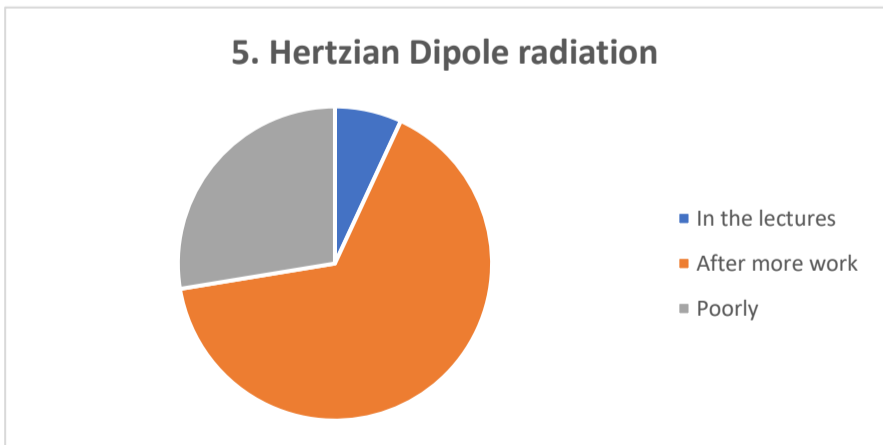
4. Relativistic formulation of Maxwell Equations

Question Type:	Multichoice		
Question #	15		
Allowed Responses:	1		
Participants:	28		
Choice:	Description	Responses	%
1	In the lectures	5	17.86
2	After more work	21	75.00
3	Poorly	2	7.14
	Total	28	



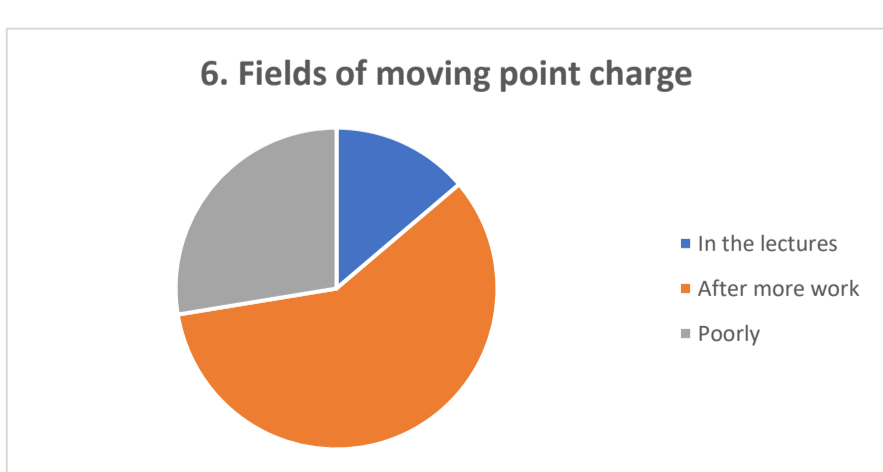
5. Hertzian Dipole radiation

Question Type:	Multichoice		
Question #	16		
Allowed Responses:	1		
Participants:	29		
Choice:	Description	Responses	%
1	In the lectures	2	6.90
2	After more work	19	65.52
3	Poorly	8	27.59
	Total	29	



6. Fields of moving point charge

Question Type:	Multichoice		
Question #	17		
Allowed Responses:	1		
Participants:	29		
Choice:	Description	Responses	%
1	In the lectures	4	13.79
2	After more work	17	58.62
3	Poorly	8	27.59
	Total	29	



The best features of this module were:**Participants:** 16

Comments rows: The overall fundamental concepts were explained well.
Diagrams used to help understanding.
It only lasted 1 term
I found the material very interesting, particularly the relationship between EM and SR. Moodle Quizzes help me keep on track with the course.
very interesting content and new mathematics
Easy quizzes
Introducing 4-vectors and tensors and their associated notation
The problem sheet questions were helpful for consolidating lecture content in preparation for the assessed quizzes
The ability to review the quiz after the submission deadline, being able to see which questions went wrong was very helpful
Good explanation of new concepts and good pace of lectures. Content was interesting.
The content
Interesting concepts
The content was very interesting. There were elements on both the theoretical side (spacetime and 4-vectors) and the practical side (antennae) so the material would appeal to many different tastes and broaden students' knowledge in many areas of physics.
diagrams and bringing the maths back to the physical meaning often.
maths was of an appropriate level, but It is ok just to state the answer to a matrix multiplication rather than go through it.
General explanation of tensor notation, and lectures deriving Faraday tensor/Maxwell's equations in the new tensor form.
Problem Sheet 1 and 2 and the first 2 quizzes were quite good. Also the content is interesting and he is a good lecturer in terms of explaining things but there's a few things he should switch.

Any particular aspects/items needing improvement (and suggestions how):**Participants:** 20

Comments rows: Many mistakes when lecturing through me off. The third quiz has a scattering question but scattering was not included in lectures.
Equations are missing factors and parts. Adding them in later doesn't help the derivation. Some directivity diagrams were quite unclear of what they showed.
Lecturer needs to have a coherent picture of where each lecture is going, many mistakes were made in lectures that were not corrected, very little faith in the correctness of almost all of the derivations carried out in lectures due to this
Not really a big deal but the lecturer was often running a bit late.
Turn up on time.. less mistakes in lectures.. better notes?
lecturing felt very unclear and lots of mistakes, possibly would benefit from consulting his own notes during lectures.
written lecture notes not very detailed and often illegible, would benefit from typed lecture notes covering examinable material
I would have liked an up to date typed set of lecture notes
Maybe write a "script" for the lecture notes. The lecturer sometimes says certain equations might be missing a factor of c^2 - it would be better if this is checked beforehand
Mathematical mistakes in lectures make it difficult to trust my own notes
It would be helpful if the module had a typed set of lecture notes
Lecturer often quiet when doing multiple steps of working out
Would be nice to have a set of typed lecture notes as some mistakes are made during lectures, and so it would be nice to have a set of notes we know are correct.
Typed notes would be helpful/notes which include exact expressions and derivations
Typeset lecture notes for the current course would be useful, which would help massively with regard to the (many) mistakes in the handwritten lecture notes
having typed lecture notes and correct equations need to be given in lectures
There were too many mistakes made during the lectures to do with missing factors (like c or ω) in equations or inserting them where they shouldn't be.
a good set of typed notes is necessary alongside my own notes to fully understand the content when doing quizzes and problem sheets
i don't trust the notes I got as the lecturer frequently made mistakes / forgot terms. Please next time make sure these don't happen
I believe the structure and clarity of direction of lectures/the course as a whole could be improved. This could be done with some extra elements on the moodle page, such as an up-to-date typed overview of the course. A full set of up-to-date typed notes would also of course be appreciated. Additionally, fairly often some mistakes were made by the lecturer while writing out the notes/derivations (missing factors of c , or sign errors); I think pre-writing the lecture notes for each lecture and essentially just copying them live in each lecture would greatly help here. Rules for tensor algebra were not made that clear, is multiplication always commutative? When can we raise/lower indices? Maybe a bit more on general tensor algebra would help.
The lecturer's handwriting is horrendous to the point of where many people including me couldn't understand what he was writing on the paper. He should have made typed notes for the course because I've met at least 10 or so people that have complained about his handwriting.

Any other comments:

Participants:

7

Comments rows:

Extremely interesting module, great topics and extremely interesting physics. Somewhat ruined by the poor quality of both lectures and notes

Overall an enjoyable module, thank you

This was my favourite module this term :).

Fix the derivations

The lecturer is clearly very intelligent, but just can make slip-ups while actually presenting. A little extra planning for each lecture would go a long way. Lecturer was friendly :)

Overall module has been somewhat positive, I enjoyed learning about 4-vectors and the first chapters but it definitely could have been better especially the end bits.