

# Course evaluation!

Intro to Micros, 2014

Results of survey

Started: 01 October 2014

Ended: 03 October 2014

Response rate: 17% ( 40 / 231 )



**UNIVERSITY OF CAPE TOWN**  
IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD

Vula Online Survey

## Course evaluation!

Hello all The time has come for you to tell us how much you love (or hate) us! We're doing this now so we have a chance to act on your suggestions and feedback before the end of the course.

Although it is submitted online, the framework provided by Vula ensures that you have complete anonymity. We have no idea who said what. Please do take a moment to tell us WHY you loved (or hated) specific things. If you don't provide detail, it's hard for us to know how to improve. You can also select specific tutors/lecturers to provide feedback for! We really do take this feedback very seriously so your constructive co-operation is much appreciated. Ideally, we'd like everyone to submit some feedback. You have until Friday to do it. Enjoy! Cheers Thomas

## Course/Group Items:

About the evaluation This student feedback questionnaire is based on UCT's Teaching & Learning Charter which guarantees minimum teaching standards to students. For each of the questions below, please choose the response that most closely matches your opinion. Please take the trouble to answer the first 3 global open-ended questions and where relevant, provide further comment to the multiple-choice questions that follow. Your feedback is confidential and the evaluation results do not include student identities, so please provide honest and thoughtful responses that can be used to improve the course. Thank You. Recognising that not all students have access to all of the tutors, you may choose to evaluate individual tutors with whom you have had contact.

### A. About the Course

You must complete all multiple-choice questions (marked \*) in this section.

#### 1. What aspects of this course do you appreciate or value?

- The c code is well taught - the step by step instructions are very informative
- the tuts and lecture slides
- The "idea" of microcontrollers
- I like the fact that we have lecture videos..this must never be removed..sometimes in class we don't really know what is happening and it is only after a lecture video that we come to understand..
- -Learning the interaction of the CPU and peripheral/sRAM

-Knowing the basics of programming in the most iconic programming language(C).I also appreciated learning Assembly language,since it expanded my knowledge of how a cpu works.

- The lectures are quite interesting and my hunger to learn new materials is satisfied after every lectures.
- The fast paced information packed lectures where questions are rewarded. Also the fact that we were expected to build our own development board was pretty cool
- The attitude of the tutors is very positive and they are very helpful MAM2082 could In a lot from this course.
- practical use programming in c has
- I appreciate the practical coding in the course
- The memos for the tuts were good. I liked the weekly pracs which kept us up to date on what was covered in class.
- I appreciate the commitment of the lectures and tutors. I think that the content of the course is very good and well structured.
- How much effort is put into this course by the lecturer/tutors and how they ACTUALLY care about their students understanding the work. Honestly this course was by far the best one in second year EEE, all the other courses have been really problematic for a lot of students but this one is just very very well done. James and Thomas are doing such a great job. You can see that they care about helping the students understand the content and learn how to use it. If they don't get commended for this course then I have lost all faith in the EEE department.
- EVERYTHING.
- Practical experience in coding
- Interesting to work with microcontrollers
- Interesting
- The practical assignments
- introduction to performing some basic applications with a micro-controller
- lecturers effort to engage with the class
- Let me start of by saying that when i compare this course to other EEE courses, Intro to Micros is worlds apart!

I really appreciate the organization of this course (GJ thomas) and the fact that it is actually taken seriously. The course is well structured, tutors actually know their stuff (a first for EEE), Lectures are relevant, practicals are relevant and our tutorials are marked with feedback and model answers!

Hallelujah!

I really hope your hard work spills over into other EEE courses.

- It is a very interesting course, well planned and well communicated. I enjoy the lectures and the subject of microcontrollers in general.
- getting to understand the microcontroller
- It is extremely well run and the content is extremely interesting.
- Practical assignments
- Recorded Lectures
- Practicals.
- .the tutors were helpful.

## 2. What aspects of this course do you find particularly difficult?

- Converting English to programming language. Often I was able to explain what needed to be done in words, but transferring that to code was very difficult.
- the practicals are difficulty
- To program the microcontrollers
- None
- -Nothing really.
- None particularly but since asked I would mention the tuts they use to be a bit tricky especially the bonus questions.
- Having only heard the subject matter of the tutorials and practical once and then being expected to have understood it perfectly in order to do them
- Atd and timers.
- looking through the reference manuals
- Understanding the new concepts of Assembly and understanding the flow of code in the beginning the course
- The workload was quite high for a 2 lecture 8 credit course
- This is my second time doing the course. So far, in my experience, all the tests and exams have been mistimed. Furthermore, the practicals in reality take far longer than the allocated time. This subject takes more time than an of my other 4th year subjects, other than my thesis.
- The tutorials, can be quite long and the answers are very specific
- none
- The practicals
- Understanding the way the reference and programming

manuals work, finding resources to help with the practicals. If you do not grasp a certain concept in time you will be left behind

- Practicals, workload
- Assembly
- ADC section
- using the instruction manuals to find addresses offsets etc
- I usually have trouble navigating through all the reference manuals and documents but I do see why this is necessary.
- The work can be difficult, just understanding the content. The constant tuts and pracs were a lot of work but I think managable and important for our understanding, so well done.
- the fact that we dont get much example code at first leading to time consuming pracs.
- The pracs are not difficult but I can never finish them in the allotted 1.5 hrs recommended time. This makes me nervous for the practical exam.
- Turorials
- Overwhelming amount of time spent doing this course. Ridiculous for an 8 Credit Course!!!!
- Understanding how to practically code!
- Practicals.
- no enough resource to understand what is happening as a beginner.

## 3. What aspects of this course do you think need attention?

- More attention needs to be paid to step by step explanations - often, in lectures and when tutors try explain, groups of information are clumped together (i.e. this line of code does this, instead of this letter means this and when you put it here, it will do that)
- more programming(practical) examples must be done in class
- Teaching this course. You can't not "TEACH" students and expect them to figure it out themselves and then the lecture after the lab was submitted start explaining what we needed to do. This is NOT the way to teach> We pay for you to teach us, this is not UNISA where it's only self-study. The whole idea is for you to teach but you don't. I expect better from this university than to provide us with this type of way to learn. It's not only this course that becomes difficult, it is wasting time when you have to research what to do and the internet is useless to teach you how to program this specific micro-controller. Just providing us with hints in the lectures is also not a sufficient way of teaching.

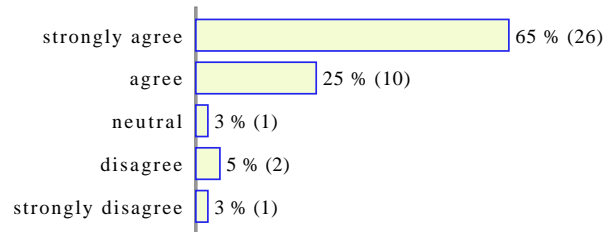
- We sometimes get things to work with our own idea, but when we don't do it using the specific things that the lecturer was expecting, we do not get marked on it..
- -I think everything is well organised and taken care of in an acceptable manner.
- The tutors availability for consultation. Most of the time when you are stuck at a stage of your prac there is no tutor around to help you out. And if some times there are it is just one person or two; thus you might never get attended to.
- The availability of tutors and giving more concrete times in which they will be in the lab.
- this course needs more credits, its more work than some 12 credit courses i do
- Coding
- The slides and notes could be more informative but I understand that it is the first year that they have been compiled.
- As mentioned above the amount of time allocated to tests is far too little. Furthermore the practicals are taking the students too long.
- The time needed to complete the pracs/tutorials is far more than what is allocated for each. Try to decrease the time needed to complete both without diminishing the difficulty too much
- none
- Tutorial and practical due dates. The time allocated is too little.
- More coding should be done during class time with clearer explanations of how to look up things in the manual
- Tutorial sessions
- Help offered for practicals, demanding workload, tutorial marking
- Assembly instructions
- the ADC section of the course was tricky to grasp
- not much, its a well run course. getting marks and feedback sooner would be good
- Sometimes I find it hard to do this course without examples, but Gowans has listened to our cries and has started doing examples in class (thank you).
- It would be nice if the notes were updated more as they are very good and if sample solutions for the pracs, tuts and the test were released. In the beginning of the course, it was difficult to get started programming the microcontroller; it would have been nice if sample code was available (the internet can be treacherous in this regard). Also why don't the White Lab computers have linux?

- more notes and prac exmaples. more pas papers
- Very little. It is without a doubt the best EEE course I have experienced here in my 3 years at UCT.
- Lectures
- Managing workload for the students especially Electrical Engineers who do 7 modules.
- Programming & coding
- Lab Sessions.
- the introduction for people who are seeing this sort of stuff for the first time,the reference manuals dont help when you dont know anything.

#### 4. Rate the purpose of this course:

**The course meets my expectations and is relevant to my programme as a whole.**

40 answers, mean = 1.55



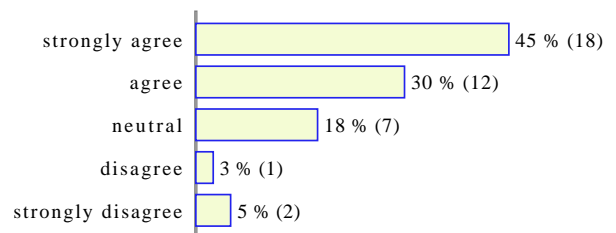
##### Comments:

- It was more difficult than expected but I can see it being very useful.
- I am an ECE and I just need to know this course ;-D

#### 5. Rate the organisation of the course:

**The course is well-planned and well-managed.**

40 answers, mean = 1.92



##### Comments:

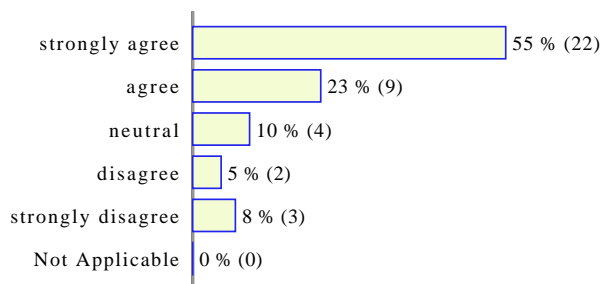
- We are not tough anything, we have to teach ourselves to program the micro-controllers.
- James is the Best..
- Hands down is the most organised EEE I've had so far.

**Rate the learning activities offered on this course:**

**I believe the learning activity is useful and coherent.**

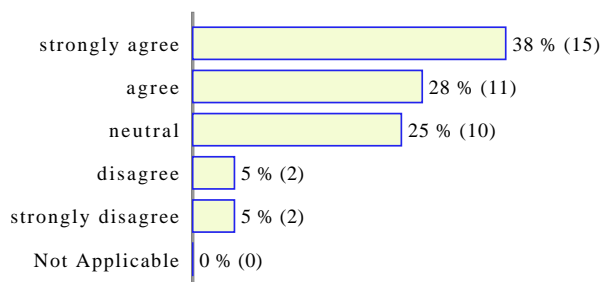
#### 6. lectures

40 answers, mean = 1.88



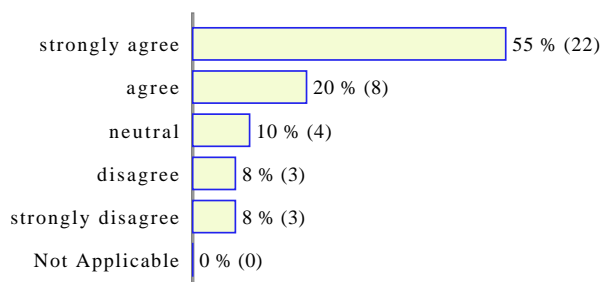
## 7. tutorials

40 answers, mean = 2.12



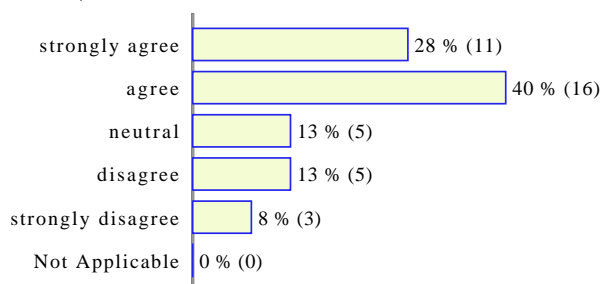
## 8. practicals

40 answers, mean = 1.92



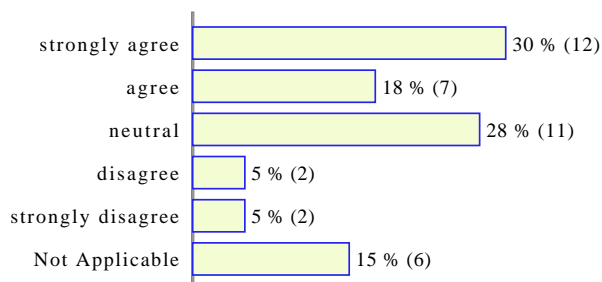
## 9. on-line resources

40 answers, mean = 2.32



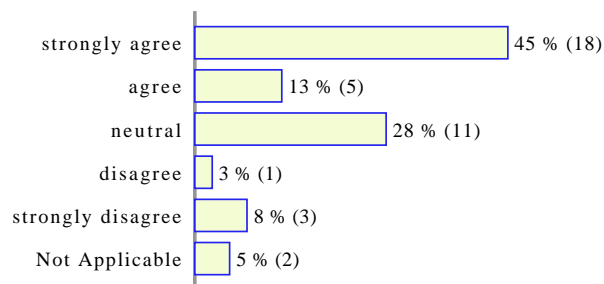
## 10. lecturer consultations

34 answers, mean = 2.26



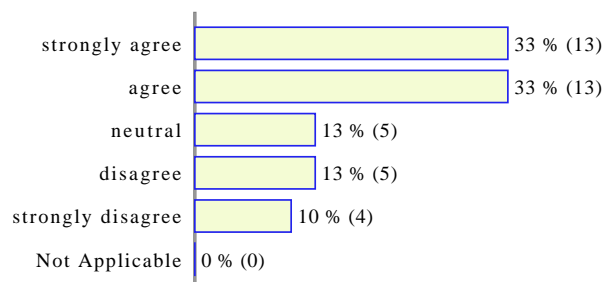
## 11. tutor consultations

38 answers, mean = 2.11



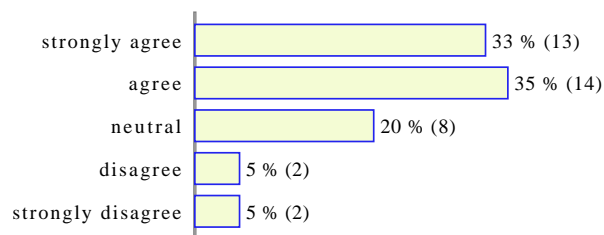
## 12. group work

40 answers, mean = 2.35



## 13. technical support (soldering, components, etc; White Lab)

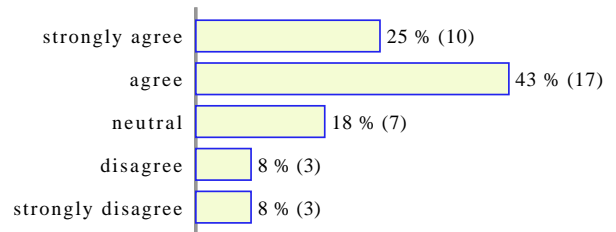
39 answers, mean = 2.13



## 14. If any of the above learning activities were problematic, please comment further.

- The practicals were often too difficult (as shown by my results). My group member and I would spend hours trying to get even the most basic functions to work. The level required in the tuts and the level of that pf the prac were miles apart.
- Teaching us in advance how to do certain things etc and then ask us to do it ourselves would be the right way to teach. Fix this issue. This is suppose to be a great university, but teaching is a problem. If I'm not mistaken, students doing masters etc are required to teach, so they lack the passion to teach. Make sure lecturers undergo a course so they know how to carry knowledge over to students who's trying to learn. It's pointless having a guy with for example with a PHD, but he doesn't know how to carry his knowledge over. Essentially this is what is happening.
- I'm not sure what times tutors are available
- Having Practicals and a Tut each week takes a lot of time and our other courses are not given priority.
- Tutorials and practicals took far more time to complete than it should have.
- N/A

- In group work, if one of the pair knows more than the other, that person can end up doing everything, leaving the other one behind. Otherwise, great course!
- The lectures felt too fast-paced and it was difficult to keep up especially if you were not very familiar with coding
- The computers at white lab were not working sometimes, for the tutorials there are not enough tutors i hardly get help because tutor busy with other students.
- the lecture slides are very difficult to learn off even in conjunction with notes. this would not be a problem if course notes were up to date but sometimes they arent (or dont cover certain sections)
- Not your fault but I felt I did more work than my partner, nearly all of it, in the pracs and tuts and I was kind of stuck with them.
- would help to update the notes.
- Tutors are not open to questions or to helping students. This was my experience during this course.
- We need better explanations on how to code. more examples to go through...etc
- we should have the choice to change group members because sometimes we stuck with someone not putting in enough effort.



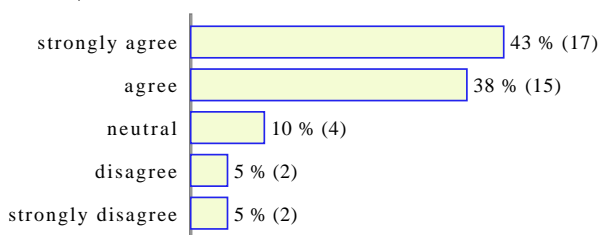
#### Comments:

- A programming manual for C code, like the one used for assembly, would be super helpful.
- Teach beginners how to use the reference manual and other relevant documents instead of just giving it to us and expect us to find out ourselves to use it for what purpose.
- Can't do without the data sheet and the extra documentation
- Notes would be nice...
- In the beginning of the course it was hard to use the datasheets and documentation because we weren't properly showed how to use them, it was as if it was assumed that we've done a course in micros before.
- The notes could have been updated more frequently. The slides have very little information which is good in class but if we have to study from them, they should have more information (maybe as notes on the slides). Also, using the reference manual and programming manual was really in depth and intense, but manageable.

### 15. Rate the learning environment provided for the course:

**The course is properly resourced and supported, e.g. library facilities, venues, technical, administrative and IT support are adequate**

40 answers, mean = 1.92



#### Comments:

- Only have the relevant micro documents, notes are never up to date with what you do in the lecturers. Does NOT do any step by step examples
- Never stop the videos recording

### 16. Rate the textbook(s) and/or readings for the course:

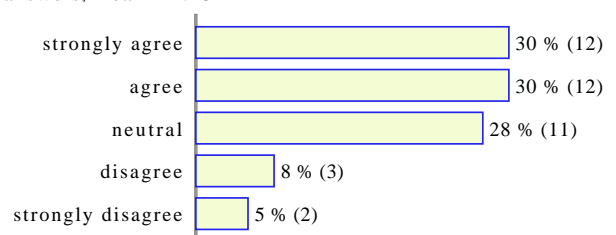
**The required readings are helpful and relevant (this includes coursenotes, slides, and the available datasheets and documentation)**

40 answers, mean = 2.30

### 17. Rate the fairness of the assessment of this course:

**The assessment requirements are fair, e.g. clearly spelt out beforehand with sufficient teaching and preparation time allocated to give you a fair chance of succeeding.**

40 answers, mean = 2.28



#### Comments:

- The level of the tuts and pracs are very different. The pracs require far more time, effort and knowledge to do. The test was fair though.
- The automaker whilst being a vast improvement in terms of time, is fairly harsh in its marking. If one makes a mistake early in the practical they score very badly.
- In the beginning of the course, the bonus marks weren't done well as it felt more like you were losing marks for handing in on Thursday rather than getting bonus (over and above) marks for Monday, probably why it was changed later.
- Considering the 7 course work load 3rd Elec Mech students

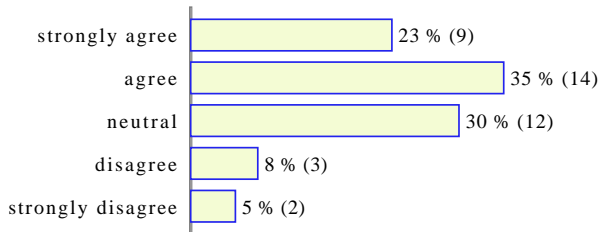
have, having a tut and a prac (often lengthly) once a week is a large pressure if wanting to succeed substantially.

## 18. Rate the feedback given on the course

### assessments:

#### I receive constructive feedback on my work.

40 answers, mean = 2.38

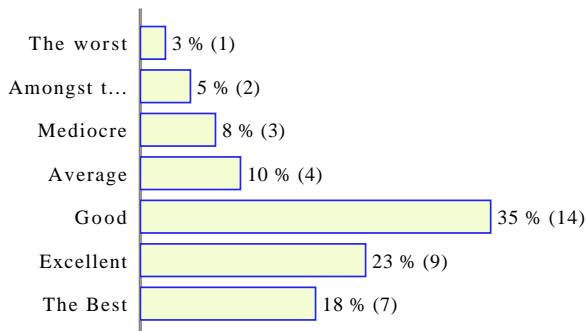


### Comments:

- You provide us with the information which we needed to do assignments the day after it has been handed in.
- The automaker and chat room are gold
- Really appreciate that tutorials and pracs are marked (mostly) on time and that we get feedback on tuts and memos.

## 19. As a unit, the TA and tutors for this course, compared to other courses in the department, are:

40 answers, mean = 5.08

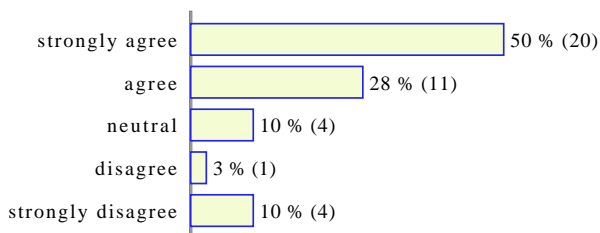


B. The Student All questions in this section are compulsory.

## 20. Rate the benefits you are gaining from this course:

### e.g. The course has contributed to my own development/ expanded myworldview/ changed my thinking.

40 answers, mean = 1.95



### Comments:

- Wasting valuable time considering we have 7 courses this semester, since we have to research and teach ourselves how

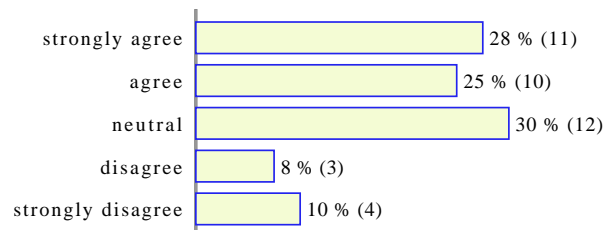
to program micro-controllers.

- It actually made me realise what exactly I want do with my Electrical engineering degree.
- Helped me understand how computers work from a lower level.

## 21. Rate the level of difficulty of the course:

### The course is pitched at the correct level of difficulty for me.

40 answers, mean = 2.48



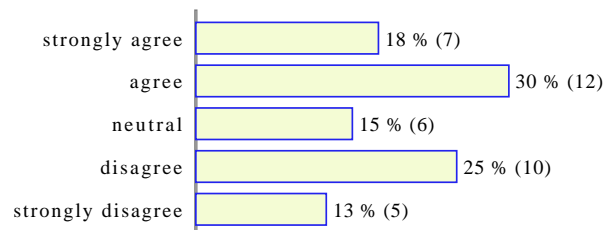
### Comments:

- Programming is very difficult, especially for those of us whose computer skills stop at Word or Excel. Please try be more accommodating to us who didn't even know what a byte was before this course, or that it was spelled with a 'y'.
- We have limited time and we have to teach ourselves, this makes it extremely difficult.
- Challenging and interesting.

## 22. Rate the workload on this course:

### The workload is manageable for me.

40 answers, mean = 2.85



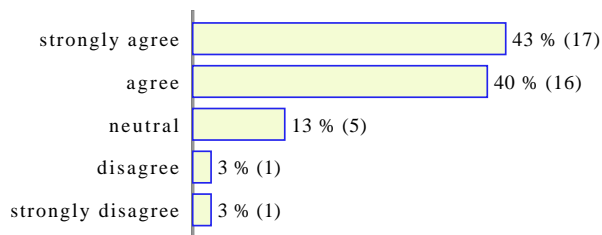
### Comments:

- The difficulty of the pracs often extend our work hours.
- Expect us to do a tutorial and prac over the weekend which takes the whole weekend to do and time the next week so we dont have time to keep up to date with the other courses since this takes ages as we have to teach ourselves.
- I find that a struggle to keep up with the work load of this course, but I think that it has more to do with the fact that ElechMechs have to do 7 subjects than the course being unreasonable. In fact I would prefer if we could spend more time on this course.
- It was too demanding, but only when the 7 courses I had placed their deadlines close together. If i was doing four courses and could focus more on this it would be completely manageable.

### 23. Rate the student interaction on the course:

**The course encourages students to work together and learn from each other.**

40 answers, mean = 1.82



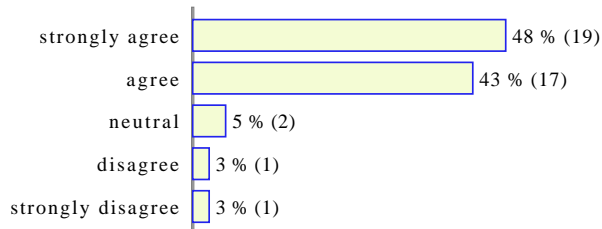
#### Comments:

- My partner did less work than me but I am stuck with them for the whole course. I'm sure they benefitted from me though :)

### 24. Rate your engagement with this course:

**I'm putting a lot into this course.**

40 answers, mean = 1.70

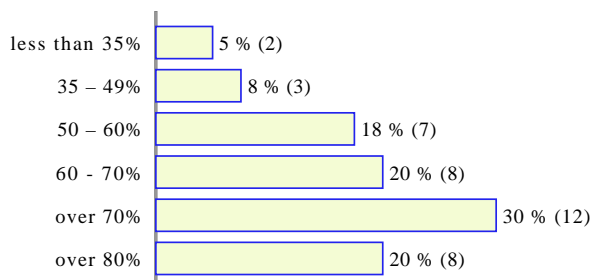


#### Comments:

- Takes too much time for an 8 credit course considering we have to teach ourselves to program this micro-controller as well. Spending the whole weekend and weekdays and still not able to get the micro programmed correctly is wasting my valuable time. You reach a point where you have to continue with the more important courses such as maths etc.
- From observation a lot of people spend more time on micros due to the very strict deadlines making it hard to focus on other courses. It would make sense if it was a 16 credit course but it is not.
- Since I failed to grasp the concepts in the beginning and there is no opportunity to catch up, I do not feel motivated to put in any effort.

### 25. Myclass mark for this course (so far) is (please make an educated guess) :

40 answers, mean = 4.22



#### Comments:

- My group have gotten 0 for more than half our pracs - it was

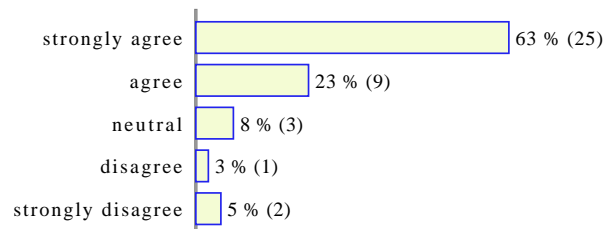
not due to lack of effort.

- the marking scheme you guys used for the test is going to make alot of people fail in the exam, i mean surely no one can write exactly whats on the memo. we dont know all the technical words that should be used ... for example if i say a microcontroller incorporates the proccessor i.e its has the cpu and and the necesesary internal peripherals WHY does that deserve a zero? its in the notes...my point is when marking its better to look for understanding from the student not if the student can cram or not. Alot of theory questions there were marked too harshly and im afraid now since the exam is theory based. Anyway James is a great lecturer , very very good at explaining things and breking things down for us. For that i thank you :) .. the marking though.... eish

### Lecturer: James Gowans

**26. Rate this lecturer's ability to teach: This lecturer knows his/her subject well and is able to communicate clearly.**

40 answers, mean = 1.65



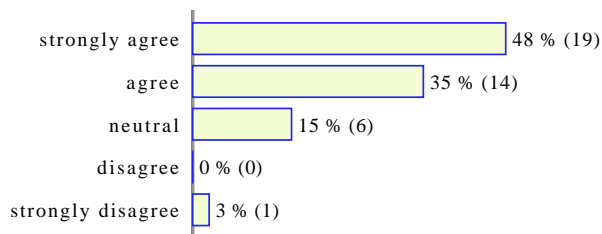
#### Comments:

- James definitely knows his content. It would be helpful to teach assembly in the way that he is teaching C code now:  
a=apple  
b=ball  
[]=address etc.  
Also, reiteration is important
- Too inexperienced considering he graduated in 2013. He seems clever, but he cannot teach, he does not have the ability to carry his knowledge over to us students. I'm disappointed at UCT for giving us inexperienced lecturers, makes you wonder where the money we pay actually go.
- James knows his stuff
- The lecturer knows his work and adds some humour into the course which is nice, but I feel he goes too fast and I don't (more often than not) get what he is trying to get across...
- James Gowans is the best EEE lecturer I have come across. He's on my all time list of favourite lecturers, please promote (Gowans for HOD!). The analogue, digital and power lecturers really need to take a page out of Gowans' book.
- Very knowlegable but the lectures are sometimes too fast.

**27. Rate this lecturer's attitude to students: This lecturer is approachable, responsive and available for consultation.**



40 answers, mean = 1.75



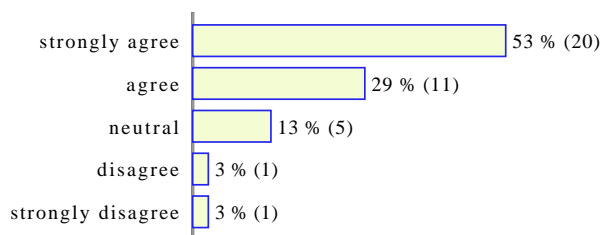
**Comments:**

- A bit unapproachable
- Always available for consultation, is approachable and very knowledgeable. I really appreciate his almost 24/7 presence on the chat room

**28. Rate this lecturer's ability to motivate students:**

**This lecturer is enthusiastic and inspiring.**

38 answers, mean = 1.74

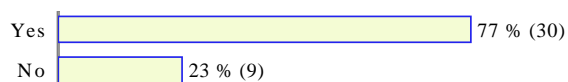


**Comments:**

- Giving us too much work, we don't even have labs for this course and it's a practical course. Revisit the course outline and add labs to this course, and make this at least a 16 credit course on it own.
- Best 2nd year Electrical engineering lecturer by far
- He can be funny which is nice
- Penalizing for submitting before a full week and giving bonus for early submission makes it unfair for students that are already struggling creating a further divide instead of helping them.

**29. Do you think this lecturer should be recommended for promotion for good teaching?**

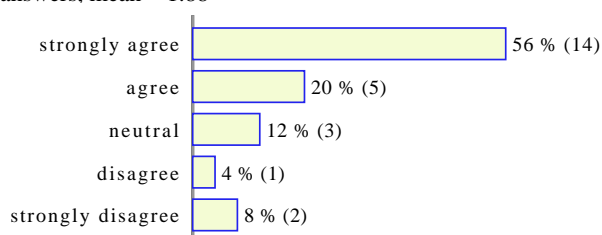
39 answers, mean = 1.23



Tutor: James Gowans

**30. Rate this tutor's ability to teach: The tutor is well-prepared and gives clear explanations.**

25 answers, mean = 1.88



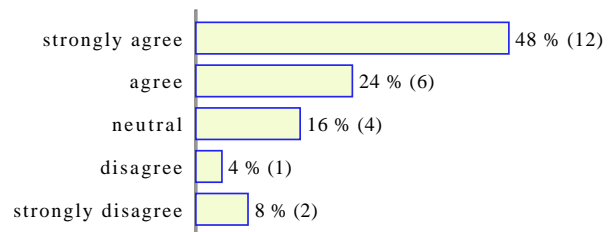
**Comments:**

- As mentioned above, too inexperienced and doesn't have the ability to carry his knowledge over to us students, Those students doing well are either doing ECE so they only have 4 courses and loads of time, students who worked at design companies for vac work and programmed micro-controllers before and students who failed a lot of courses so they don't have the heavy workload we have.

**31. Rate this tutor's attitude to students:**

**The tutor is approachable and supportive.**

25 answers, mean = 2.00



**Comments:**

No Comments