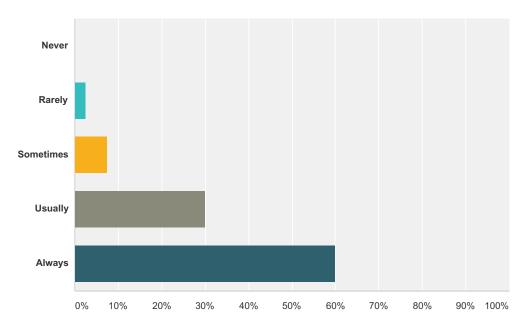
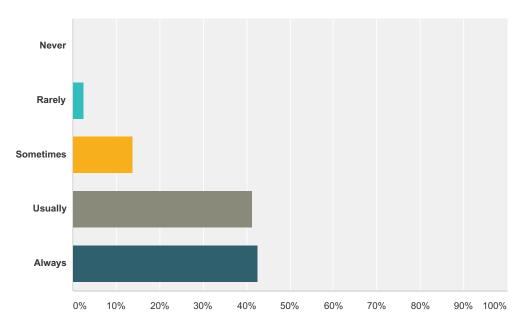
### Q1 I regularly attend the weekly classes for the course





| Answer Choices | Responses |    |
|----------------|-----------|----|
| Never          | 0.00%     | 0  |
| Rarely         | 2.50%     | 2  |
| Sometimes      | 7.50%     | 6  |
| Usually        | 30.00%    | 24 |
| Always         | 60.00%    | 48 |
| Total          |           | 80 |

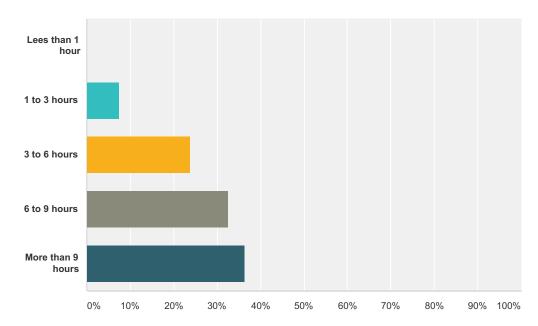
# Q2 I invest enough time and effort to meet/exceed course requirements



| Answer Choices | Responses |    |
|----------------|-----------|----|
| Never          | 0.00%     | 0  |
| Rarely         | 2.50%     | 2  |
| Sometimes      | 13.75%    | 11 |
| Usually        | 41.25%    | 33 |
| Always         | 42.50%    | 34 |
| Total          |           | 80 |

#### Q3 On average how many hours per week do you spend studying on this course outside formal class time and including reading, homework assignments, reports and studying for exams?

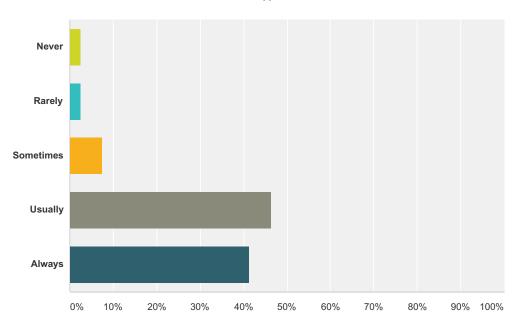
Answered: 80 Skipped: 0



| Answer Choices    | Responses        |
|-------------------|------------------|
| Lees than 1 hour  | 0.00%            |
| 1 to 3 hours      | <b>7.50%</b> 6   |
| 3 to 6 hours      | <b>23.75%</b> 19 |
| 6 to 9 hours      | <b>32.50%</b> 26 |
| More than 9 hours | <b>36.25%</b> 29 |
| Total             | 80               |

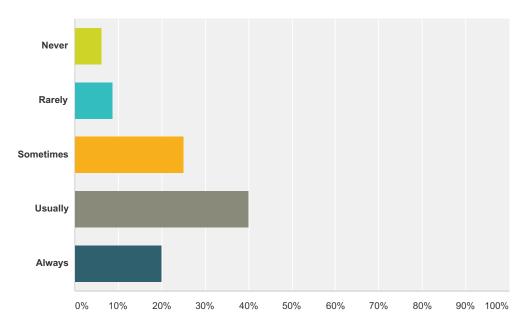
## Q4 I participate actively and thoughtfully in classes





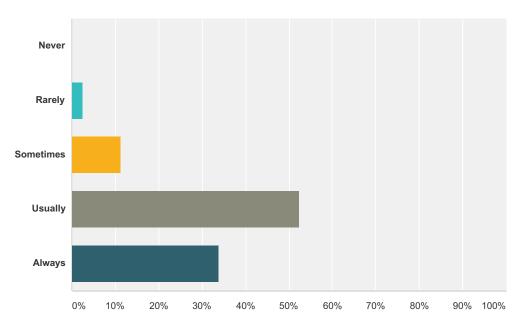
| Answer Choices | Responses |    |
|----------------|-----------|----|
| Never          | 2.50%     | 2  |
| Rarely         | 2.50%     | 2  |
| Sometimes      | 7.50%     | 6  |
| Usually        | 46.25%    | 37 |
| Always         | 41.25%    | 33 |
| Total          |           | 80 |

### Q5 I ask the lecturers for help/guidance when I need it



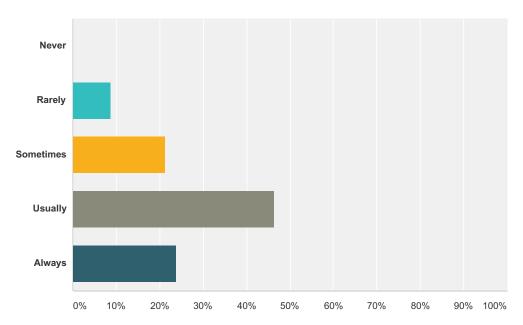
| Answer Choices | Responses |    |
|----------------|-----------|----|
| Never          | 6.25%     | 5  |
| Rarely         | 8.75%     | 7  |
| Sometimes      | 25.00%    | 20 |
| Usually        | 40.00%    | 32 |
| Always         | 20.00%    | 16 |
| Total          |           | 80 |

# Q6 Lectures, tutorials and labs seem well integrated



| Answer Choices | Responses |    |
|----------------|-----------|----|
| Never          | 0.00%     | 0  |
| Rarely         | 2.50%     | 2  |
| Sometimes      | 11.25%    | 9  |
| Usually        | 52.50%    | 42 |
| Always         | 33.75%    | 27 |
| Total          |           | 80 |

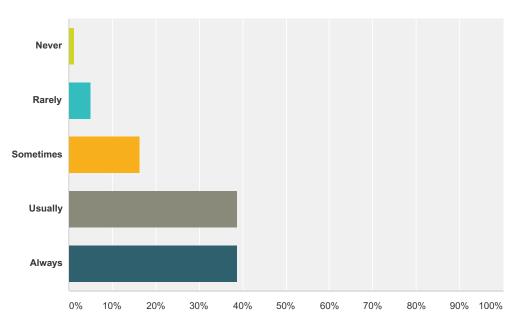
## Q7 The assigned readings significantly contribute to this course



| Answer Choices | Respo | onses       |
|----------------|-------|-------------|
| Never          | 0.00% | 0           |
| Rarely         | 8.75% | 7           |
| Sometimes      | 21.25 | <b>%</b> 17 |
| Usually        | 46.25 | <b>%</b> 37 |
| Always         | 23.75 | <b>%</b> 19 |
| Total          |       | 80          |

## Q8 Lab experiences assist me in learning concepts

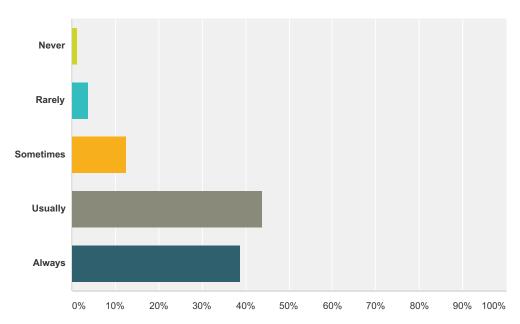




| Answer Choices | Responses |    |
|----------------|-----------|----|
| Never          | 1.25%     | 1  |
| Rarely         | 5.00%     | 4  |
| Sometimes      | 16.25%    | 13 |
| Usually        | 38.75%    | 31 |
| Always         | 38.75%    | 31 |
| Total          |           | 80 |

# Q9 The course encourages me to think critically

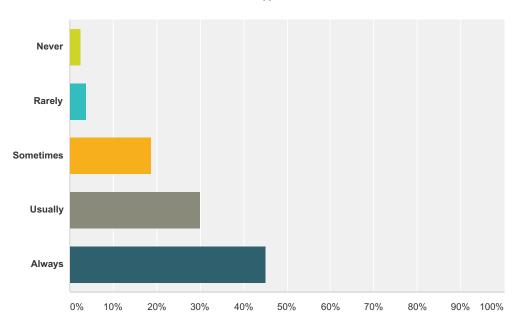




| Answer Choices | Responses |    |
|----------------|-----------|----|
| Never          | 1.25%     | 1  |
| Rarely         | 3.75%     | 3  |
| Sometimes      | 12.50%    | 10 |
| Usually        | 43.75%    | 35 |
| Always         | 38.75%    | 31 |
| Total          |           | 80 |

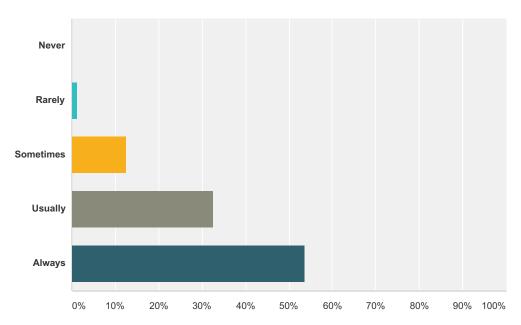
### Q10 The homework improves my technical skills





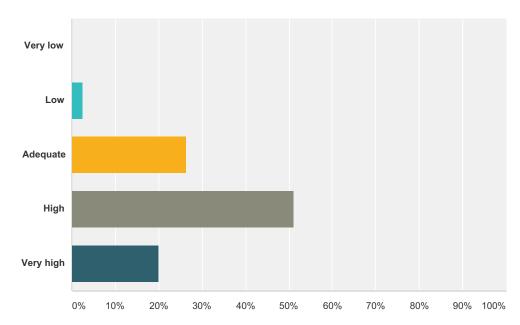
| Answer Choices | Responses |    |
|----------------|-----------|----|
| Never          | 2.50%     | 2  |
| Rarely         | 3.75%     | 3  |
| Sometimes      | 18.75%    | 15 |
| Usually        | 30.00%    | 24 |
| Always         | 45.00%    | 36 |
| Total          |           | 80 |

# Q11 The course assists me to develop group work skills



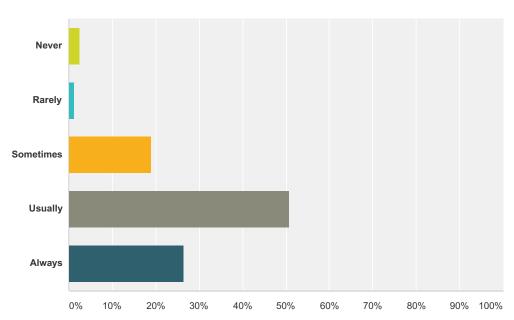
| Answer Choices | Responses |    |
|----------------|-----------|----|
| Never          | 0.00%     | 0  |
| Rarely         | 1.25%     | 1  |
| Sometimes      | 12.50%    | 10 |
| Usually        | 32.50%    | 26 |
| Always         | 53.75%    | 43 |
| Total          |           | 80 |

## Q12 Overall the level of intellectual challenge is



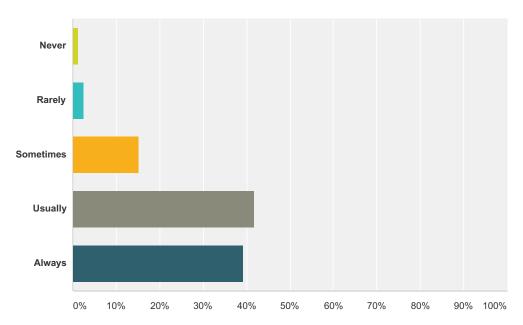
| Answer Choices | Responses |    |
|----------------|-----------|----|
| Very low       | 0.00%     | 0  |
| Low            | 2.50%     | 2  |
| Adequate       | 26.25%    | 21 |
| High           | 51.25%    | 41 |
| Very high      | 20.00%    | 16 |
| Total          |           | 80 |

## Q13 Team teaching is used effectively in this course



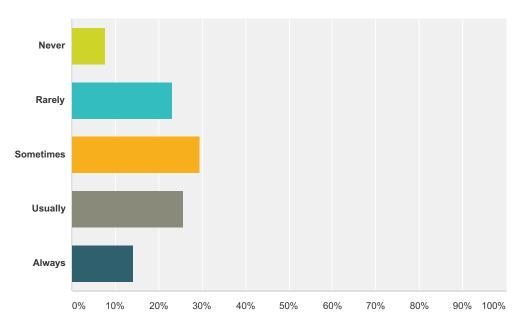
| Answer Choices | Responses |    |
|----------------|-----------|----|
| Never          | 2.53%     | 2  |
| Rarely         | 1.27%     | 1  |
| Sometimes      | 18.99%    | 15 |
| Usually        | 50.63%    | 40 |
| Always         | 26.58%    | 21 |
| Total          |           | 79 |

## Q14 My lecturers are freely available for consultation



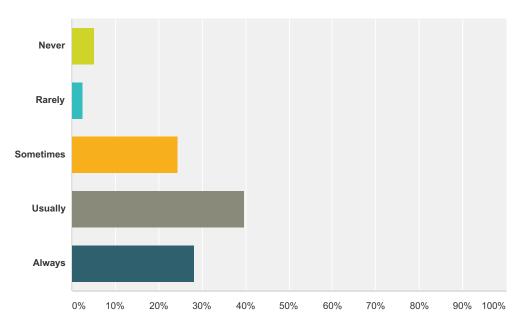
| Answer Choices | Responses |    |
|----------------|-----------|----|
| Never          | 1.27%     | 1  |
| Rarely         | 2.53%     | 2  |
| Sometimes      | 15.19%    | 12 |
| Usually        | 41.77%    | 33 |
| Always         | 39.24%    | 31 |
| Total          |           | 79 |

# Q15 The Monday theory lectures contribute to my learning



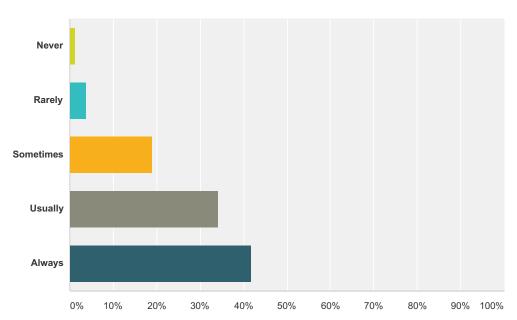
| Answer Choices | Responses |    |
|----------------|-----------|----|
| Never          | 7.69%     | 6  |
| Rarely         | 23.08%    | 18 |
| Sometimes      | 29.49%    | 23 |
| Usually        | 25.64%    | 20 |
| Always         | 14.10%    | 11 |
| Total          |           | 78 |

# Q16 The Facebook page is useful to my learning



| Answer Choices | Responses |    |
|----------------|-----------|----|
| Never          | 5.13%     | 4  |
| Rarely         | 2.56%     | 2  |
| Sometimes      | 24.36%    | 19 |
| Usually        | 39.74%    | 31 |
| Always         | 28.21%    | 22 |
| Total          |           | 78 |

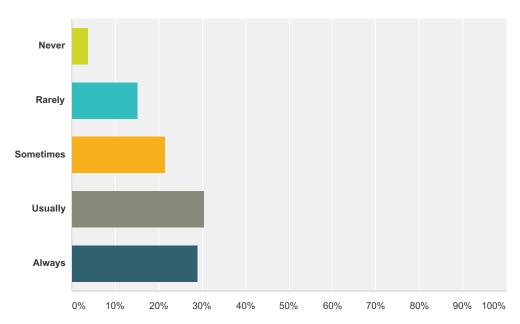
# Q17 The activities using Web Assign assist my learning



| Answer Choices | Responses |    |
|----------------|-----------|----|
| Never          | 1.27%     | 1  |
| Rarely         | 3.80%     | 3  |
| Sometimes      | 18.99%    | 15 |
| Usually        | 34.18%    | 27 |
| Always         | 41.77%    | 33 |
| Total          |           | 79 |

# Q18 I use the lpad software to enhance my ability to do physics in the labs





| Answer Choices | Responses |    |
|----------------|-----------|----|
| Never          | 3.80%     | 3  |
| Rarely         | 15.19%    | 12 |
| Sometimes      | 21.52%    | 17 |
| Usually        | 30.38%    | 24 |
| Always         | 29.11%    | 23 |
| Total          |           | 79 |

## Q19 The things I am finding most difficult are......

| #  | Responses  | Date              |
|----|--|-------------------|
| 1  | EVERYTHING questions, concepts, labsetc  | 3/25/2014 1:37 PM |
| 2  | English  | 3/25/2014 1:33 PM |
| 3  | The structure of the class: Fri - lecture, Mon tute. I have little time to read AND do the quiz before the tute. The reading and quiz take a huge amount of time to get through for me (up to 30hrs/wk).   | 3/25/2014 1:32 PM |
| 4  | Getting all the equations associated with the equation worked out, then managing to apply the different concepts in the part B and C equations - e.g. can work out the change in kinetic energy easily enough, but applying friction and an angle makes it difficult. The basic concepts are easily grasped, gathering all the different concepts that we've learnt and applying it to a single problem is difficult. Additionally I am finding it difficult with the amount of concepts to learn - we go at a blistering pace, but that is inherent in the course.  | 3/25/2014 1:32 PM |
| 5  | Finding time to effectively complete the Webassign homework as i generally have lots of other Homework and study items that I must have completed in the same time frame.  | 3/25/2014 1:31 PM |
| 6  | Homework seems to take too long, thus not much enough time to study other subjects.  | 3/25/2014 1:30 PM |
| 7  | To understand all the concepts, especially some of those which involve. Do not have enough time to complete weekly assignment, even though I tried very hard to finish my readings and the tutorials before doing the tasks.   | 3/25/2014 1:30 PM |
| 8  | The amount of time required to complete the homework. Learning a concept correctly after failing a homework question as it does not let you know what you did wrong or how to improve. It should at least let you know the correct answer so you can work out what you did wrong and not make the same mistakes next time.   | 3/25/2014 1:30 PM |
| 9  | In lab class, it is a little difficult for me to debate with my teammates fluently.  | 3/25/2014 1:30 PM |
| 10 | Applying formula learnt in lectures-Knowing how to use them, web assign.   | 3/25/2014 1:29 PM |
| 11 | The things that I am finding most difficult in learning physics is I forgot almost every basically knowledge about physics as I have not been in touch with physics for like 2 years. And during the study, I find that pendulum and acceleration is really confused me. At first, As I am not a local I can not understand some academic vocabularies such as kinetic energy or even the velocity. But now I feelehh ok since I write down every words I do not understand then review it. Still a long long way to go.   | 3/25/2014 1:29 PM |
| 12 | Lab. 4 hours lab is a little bit long for me, especially I have classes from 10am without any break. It's quite hard to participate such an intensive activity for that long period. Also, when my team member got confused about the experiments, I often found myself unable to follow what we were doing, ending up with wasting the the entire lab session. I understand that the try-and-error process is important for physics, but not sure if it helps me with understanding concepts.   | 3/25/2014 1:29 PM |
| 13 | Time management of this course. Even though the concepts themselves aren't extremely difficult, I find that the overall workload of the homework is quite large. The thing that I find most challenging in this course is the weekly pracs. Although they are helpful sometimes, 4 hours seems like a very long time to have one each week. The same things can be done with having pracs every two weeks and having more tutorials to ask specific questions instead of understanding the main concept, especially since we will get good practise with writing lab reports on the assignment instead of the pracs. | 3/25/2014 1:28 PM |
| 14 | applying many of the different concept we learned in class, if i don't get the concept i don't get the equation. Less commonly, the equations sometimes proves difficult to do. maybe go over all the possible math equation we might use on the exams, homework, or lab.  | 3/25/2014 1:27 PM |
| 15 | Rearranging the equations to gain the results needed and sometimes finding the appropriate equation.   | 3/25/2014 1:26 PM |
| 16 | It's quite difficult to seek help for building concepts and apply the right equation in different situations.  | 3/25/2014 1:26 PM |
| 17 | The language problem.I couldn't communicate with my group members easily cause my English is not good.Sometimes,I cannot keep up with teachers.  | 3/25/2014 1:26 PM |
|    | Sometimes I am confused about the meaning of the questions in the Wedassign.   | 3/25/2014 1:26 PM |

|    | • /   |                   |
|----|---|-------------------|
| 19 | Sometimes I've found having only one attempt for part C of weekly homework is difficult. I need one more attempt so that I can think more deeply for the questions.   | 3/25/2014 1:25 PM |
| 20 | The reading materials are not enough to do homework. To do homework I usually use other sources to get information which waste my time. Managing that time is the most difficult task for me.   | 3/25/2014 1:25 PM |
| 21 | Learning the different formulas and knowing when to use them  | 3/25/2014 1:24 PM |
| 22 | write the lab report.   | 3/25/2014 1:24 PM |
| 23 | Spending enough time on the homework and communicating with group members during labs.  | 3/25/2014 1:24 PM |
| 24 | 1 Maths 2 Numbers 4 maths   | 3/25/2014 1:24 PM |
| 25 | THE HOMEWORK Trying to spend alot of time doing other things besides the homework   | 3/25/2014 1:24 PM |
| 26 | The language problem is very difficult, but after more team lab works, my language improves a lot. And, some of homework is very hard to do, i need to think the process of motion thoughtfully.  | 3/25/2014 1:24 PM |
| 27 | In the lab, designing a experiment is a difficult part. In addition, Part C for homework is a big chanllege for me.   | 3/25/2014 1:24 PM |
| 28 | I had no idea about the incoming test. I do not know how to review and prepare it.  | 3/25/2014 1:24 PM |
| 29 | The concepts and which ones to apply in which situations, how to approach answering a question  | 3/25/2014 1:23 PM |
| 30 | Finding useful feedback from webassign Finding time to complete webassign   | 3/25/2014 1:23 PM |
| 31 | Getting head around math concepts Forgetting formulas, finding it difficult to grasp some formulas due to way its presented in book/lectures The amount of time I need to dedicate to homework that is causing me to be yelled at by one of my other tutorial lecturers The tutorials are very useful but I find they are never long enough and I can only go to two Labs are long and difficult (but thats to be expected) | 3/25/2014 1:23 PM |
| 32 | Being disciplined in my approach to homework.   | 3/25/2014 1:23 PM |
| 33 | English language was a problem.   | 3/25/2014 1:22 PM |
| 34 | The Practicals are very challenging but contribute a lot to my learning. The group dynamic is a challenge o organise sometimes and finding equipment that suits the experiments we are asked o complete can sometimes be very hard.   | 3/25/2014 1:22 PM |
| 35 | The lab sessions prove to be a little challenging at times due to the fact that we do not have enough equipment to go around the entire physics cohort.   | 3/25/2014 1:22 PM |
| 36 | The quantity of webassign questions. I am left with little time to research topics to build an understanding of the concepts.   | 3/25/2014 1:22 PM |
| 37 | The homework given in this course is quite extensive, so making time to complete the homework is quite difficult, so less howework questions would be better.   | 3/25/2014 1:21 PM |
| 38 | I feel as though there are too much homework problems. Maybe decrease the number of part A questions to 10? Applying concepts to sitimulus/ problems that are different.  | 3/25/2014 1:21 PM |
| 39 | Understanding the concepts and not just plugging values into formulas. I find the concepts are really interesting, but sometimes in the homework I get caught up in just figuring out which equation to use. Usually, when I am stressing about equations, thats when I'm most discouraged because I feel like I'm not learning anything practical. The conceptual aspect is definitely the best.                           | 3/25/2014 1:21 PM |
| 10 | The practicals - coming up with ideas to test concepts.   | 3/25/2014 1:21 PM |
| 11 | Writing a lab report is the hardest thing for me. I'm not a native speaker.   | 3/25/2014 1:21 PM |
| 12 | the English concepts as well as communicating in Englisj  | 3/25/2014 1:20 PM |
| 13 | the thing I am finding most difficult is the weekly homework  | 3/25/2014 1:20 PM |
| 14 | English is still not good enough, so I might have some difficulties while communicate with my group members in physics lab. What lead to I sometimes fail to express my ideas clearly.  | 3/25/2014 1:20 PM |
| 45 | Application of the concepts, deriving a more complex formula from simpler formulas, and choosing the correct formulas/concepts from the ones known already for a question.  | 3/25/2014 1:20 PM |
| 46 | Solving WebAssign homework questions, understanding the concepts behind the equations used in physics and applying that to real life situations such as in the labs   | 3/25/2014 1:20 PM |
| 47 | Since I have schedule conflict with the lecture, I have hard time learning from the powerpoint. I do want it to be more self-explanatory and more detailed, since reading the textbook help only 50% of the time.   | 3/25/2014 1:20 PM |

| 48 | Noop.   | 3/25/2014 1:19 PM |
|----|---|-------------------|
| 49 | using webassign. also understanding the notation used.  | 3/25/2014 1:19 PM |
| 50 | Lab report and manage my time spend in this course.   | 3/25/2014 1:19 PM |
| 51 | -webassign (1 submission)   | 3/25/2014 1:19 PM |
| 52 | Sometimes I cannot understand the meaning of questions in the homework.   | 3/25/2014 1:19 PM |
| 53 | few attempts in Part C  | 3/25/2014 1:19 PM |
| 54 | The WebAssign assessments/assignments   | 3/25/2014 1:18 PM |
| 55 | The amount of homework that is required.  | 3/25/2014 1:18 PM |
| 56 | Homework (need help). Understanding the examples from and than applying the same concepts to the homework. Practicals (sometimes). Need more help with theory (concepts). Understanding the basic concept of formula. Test (coming up).   | 3/25/2014 1:18 PM |
| 57 | Experiment report.  | 3/25/2014 1:18 PM |
| 58 | Time management for WebAssign Quizzes   | 3/25/2014 1:18 PM |
| 59 | The length of time required to put into homework, when balancing other classes as well.   | 3/25/2014 1:18 PM |
| 60 | finding the right equation to use to solve a problem  | 3/25/2014 1:17 PM |
| 61 | The assignment. Especially, in part B and part C  | 3/25/2014 1:17 PM |
| 62 | The homework - particularly relating the general concepts covered in the theory lectures to the practical problems of the homework. I also find it difficult to relate the simple examples worked through in the textbook with the difficult problems in the WebAssign quizzes. It is just difficult to work out what the homework questions want me to do and calculate. | 3/25/2014 1:17 PM |
| 63 | Getting through the four hour lab without a break. One lab everyweek is mentality taxing.   | 3/25/2014 1:17 PM |
| 64 | Volume of homework, difficult to manage with volume of other course's work part B and C of homework assignments   | 3/25/2014 1:17 PM |
| 65 | Group work in the labs Understanding the topics conceptually rather than just using the equations   | 3/25/2014 1:17 PM |
| 66 | The homework The fast pace  | 3/25/2014 1:16 PM |
| 67 | *Having time to do the readings before the weekly lab   | 3/25/2014 1:16 PM |
| 68 | The homework  | 3/25/2014 1:16 PM |
| 69 | Some of the questions in the quizzes and generating an initial idea for you practicals.   | 3/25/2014 1:16 PM |
| 70 | Some of the harder WebAssign questions, just trying to figure out exactly how to approach the question.   | 3/25/2014 1:16 PM |
| 71 | Meeting the homework requirements   | 3/25/2014 1:15 PM |

# Q20 Which two or three specific aspects of this course are contributing most to your learning?

| #  | Responses  | Date              |
|----|--|-------------------|
| 1  | the powerpoint slides made by lecturer calculations from webassign   | 3/25/2014 1:37 PM |
| 2  | experiments  | 3/25/2014 1:33 PM |
| 3  | While the quiz takes a long time, I do find it helpful in learning.  | 3/25/2014 1:32 PM |
| 4  | Definitely the Web Assign homework and the Labs are very useful for my understanding. The homework allows the mathematical side of the Physics course to be applied and given a chance to interact with the equations ourselves. The labs are good to understand the concepts and show the interconnectedness of the concepts. An example is a recent lab using a ramp and cars and balls. It required knowledge of different types of energy, conservation of energy, applying concepts like slipping and moment of inertia. It is very good way of understanding many concepts and how they interact with each other. The lectures are very useful for the large amount of concepts needed before they're applied. | 3/25/2014 1:32 PM |
| 5  | 1) Webassign 2) Practicals These contribute to my learning most as I need to figure things out myself and be thinking about how I should go about the problems I can seem to learn better as a result  | 3/25/2014 1:31 PM |
| 6  | 1. Convenes, lecturer and tutors are all friendly, which makes me enthusiasm to study physics. 2. I like lecture slides.   | 3/25/2014 1:30 PM |
| 7  | Estimation skills, conceptual understanding, logical deductions  | 3/25/2014 1:30 PM |
| 8  | The homework is good practice. The readings are good. It would be be better if the lectures and the homework content were more closely linked.   | 3/25/2014 1:30 PM |
| 9  | Lab lessons and some difficult questions in our homework.  | 3/25/2014 1:30 PM |
| 10 | Applying concepts taught in lectures, assistance from roaming helpers.   | 3/25/2014 1:29 PM |
| 11 | Pendulum and kinetic energy and power.   | 3/25/2014 1:29 PM |
| 12 | Webassign home work. Because it gives me feedback straight away. It is also the easiest way to know if my reasoning and understanding are correct. Lectures on Friday. The lecturer included many examples to explain the concepts.  | 3/25/2014 1:29 PM |
| 13 | The lectures are very with understanding the concepts. Another very helpful part is the textbook. It explains the concepts quite well. The homework is very helpful, however does take up a large amount of my time.   | 3/25/2014 1:28 PM |
| 14 | the lectures are helping with a lot of new and basic physics concepts. The labs help me with my creativity in problem solving and teamwork.  | 3/25/2014 1:27 PM |
| 15 | The webassign and the Prac's   | 3/25/2014 1:26 PM |
| 16 | Team working in labs   | 3/25/2014 1:26 PM |
| 17 | Labs are very useful to make the knowledge clearer for me to understand. Tutorials help me get more skills and methods to think about a question.  | 3/25/2014 1:26 PM |
| 18 | Team experiment  | 3/25/2014 1:26 PM |
| 19 | Group lab sessions and tutorials have improved my understanding of concepts in physics because I can discuss them with fellow classmates.  | 3/25/2014 1:25 PM |
| 20 | Lab and lecture.   | 3/25/2014 1:25 PM |
| 21 | Text book, amazon study books and lab work   | 3/25/2014 1:24 PM |
| 22 | The lab class and Friday's class.  | 3/25/2014 1:24 PM |
| 23 | Having numerous teachers who are available to point me in the right direction without doing things completely for me is great. The homework complements the textbook really well, motivating me to read it.  | 3/25/2014 1:24 PM |
| 24 | Homework - Before touching the textbook each week I first tackle the homework. Only then do I tend to research any concepts I do not seem to have a grasp on.  | 3/25/2014 1:24 PM |
|    |  | -                 |

|    | ·   | 1                 |
|----|---|-------------------|
| 25 | I remember every lab very clearly, i learned a lot from labs.   | 3/25/2014 1:24 PM |
| 26 | During the lab, I have learnt a lot of knowledge about physics. Although homework is difficult, it's also help me a lot.  | 3/25/2014 1:24 PM |
| 27 | Lab and Friday lecture  | 3/25/2014 1:24 PM |
| 28 | We assign homework, some reading, and help from the lectureres and the team here to help  | 3/25/2014 1:23 PM |
| 29 | Group activities Lectures Instructures  | 3/25/2014 1:23 PM |
| 30 | Homework is forcing through concepts/formulas into my brains Tutorial sessions helping me get concepts Small scale interactions with lecturers/other students to help me get concepts   | 3/25/2014 1:23 PM |
| 31 | The discussion of ideas with my lab group at when we find a solution for the problem. The help given by the teaching staff during labs.   | 3/25/2014 1:23 PM |
| 32 | More thinking critically in this course.  | 3/25/2014 1:22 PM |
| 33 | Algebra, geography  | 3/25/2014 1:22 PM |
| 34 | The laboratory and the quizzes. I have a decent background in physics so the lectures are often more revision then new learning.  | 3/25/2014 1:22 PM |
| 35 | The assignments on Webassign are really helpful in reinforcing the basics and concepts of each topic as they are independent and allows us to push ourselves to do well in them. The lab sessions are extremely useful as well as it encourages us to be creative and explore new ideas for each experiment.  | 3/25/2014 1:22 PM |
| 36 | Labs. Theory lecture.   | 3/25/2014 1:22 PM |
| 37 | The lectures, readings and labs are contributing a lot to me learning in this course.   | 3/25/2014 1:21 PM |
| 38 | Reading through the text book. And using the same concepts over and over again.   | 3/25/2014 1:21 PM |
| 39 | Practical problem solving - I definitely learn the most about concepts during the labs because we actually have to BUILD something and understand WHY we built it that certain way. It is a great way to approach physics, because I learn best through actually doing things. Lecturers/Tutors etc all seem invested in helping me understand rather than just succeed.                              | 3/25/2014 1:21 PM |
| 40 | -Homework (webassign quiz): concepts and techniquesThe lectures   | 3/25/2014 1:21 PM |
| 41 | The homework tasks on Webassign help largely with the application of concepts and is a good source of practice. The labs also contribute well due to the hands on nature of the learning  | 3/25/2014 1:21 PM |
| 42 | Communication with teammates. The ability to solve problem. The atmosphere.   | 3/25/2014 1:21 PM |
| 43 | Webassign Lab   | 3/25/2014 1:20 PM |
| 44 | the weekly labs   | 3/25/2014 1:20 PM |
| 45 | New physics concepts learning and Asking for help from someone who knows this very well. :D   | 3/25/2014 1:20 PM |
| 46 | The freedom teachers provide to students, and teachers always seek activeness in students, which help encourage students to think for themselves.   | 3/25/2014 1:20 PM |
| 47 | WebAssign homework (Facebook group included), textbook, labs  | 3/25/2014 1:20 PM |
| 48 | - The difficulty level of the homework is very logical. I learn a lot by starting with the basic then moving on to more complicated problems During the lab, I really like it when the TA or lecturers go around to check in with us and give advice. They usually bring up problems/issues that we fail to acknowledge, or gives us some advice on why certain things work, and why the other don't. | 3/25/2014 1:20 PM |
| 49 | Lab and discussion.   | 3/25/2014 1:19 PM |
| 50 | Labs, lectures  | 3/25/2014 1:19 PM |
| 51 | Group working skills Different difficult levels of homework   | 3/25/2014 1:19 PM |
| 52 | -facebok group -labs  | 3/25/2014 1:19 PM |
| 53 | Teamwork in Lab classes Interesting demonstration of physics in Lab class   | 3/25/2014 1:19 PM |
| 54 | concepts calculations   | 3/25/2014 1:19 PM |
| 55 | -labs -homework -tutorials  | 3/25/2014 1:18 PM |
| 56 | The labs and the homework and the Facebook page.  | 3/25/2014 1:18 PM |

| 57 | Practicals Homework  | 3/25/2014 1:18 PM |
|----|--|-------------------|
| 58 | The logical arrangement of the lectures, homework and experiment.  | 3/25/2014 1:18 PM |
| 59 | WebAssign Lecture  | 3/25/2014 1:18 PM |
| 60 | The homework - tests my understanding The prac - allows me to see the concepts in action and how the ideas and concepts work in a visual way. The Pal session - help in understanding when to apply, which concepts. | 3/25/2014 1:18 PM |
| 61 | the labs and homework  | 3/25/2014 1:17 PM |
| 62 | Labs and tutorials.  | 3/25/2014 1:17 PM |
| 63 | - Theory lectures - The homework and reading the textbook  | 3/25/2014 1:17 PM |
| 64 | The labs provide an excellent platform to apply concepts.  | 3/25/2014 1:17 PM |
| 65 | homeworks, lectures lab reports consultation with lecturers and demonstrators  | 3/25/2014 1:17 PM |
| 66 | WebAssign and the lectures contribute the most, because I can get instruction from the lecturer, then teach myself some additional things using the WebAssign  | 3/25/2014 1:17 PM |
| 67 | Labs   | 3/25/2014 1:16 PM |
| 68 | *WebAssign homework *Lecture *Readings   | 3/25/2014 1:16 PM |
| 69 | Lecture and Lab  | 3/25/2014 1:16 PM |
| 70 | The Quizzes and Practicals   | 3/25/2014 1:16 PM |
| 71 | - Lectures - Assistance in class or labs from the helpers - The labs consolidate what we've learnt mostly from the lectures  | 3/25/2014 1:16 PM |
| 72 | The labs and webassign quizes  | 3/25/2014 1:15 PM |

# Q21 Please suggest one or two specific, practical changes that could improve learning in this course

| #  | Responses  | Date              |
|----|--|-------------------|
| 1  | Put more examples during lectures with calculations from our webassign homework tasks  | 3/25/2014 1:37 PM |
| 2  | Give students some exercises which are not marked.   | 3/25/2014 1:33 PM |
| 3  | Mon - Lect, Thu tute, Fri prac. I would like to have more discussion and interaction on understanding the 'concepts' in order for me to understand how to extrapolate from the various formula's and equations. Have more tutorials explaining how you can substitute all the different information into different equations etc.  | 3/25/2014 1:32 PM |
| 4  | Homework part C seems to be less useful than the other two parts. The questions are very difficult, and the one attempt means that it is very rare to get a good mark. On top of this, there is no incentive to understand what the mistake was if it is wrong - I would reccomend either applying a tutorial to the part 5 questions that are available after the question was marked incorrectly - or they're given up on - so that there is at least an easy way to understand the question, because otherwise there is very little chance of understanding the mistake that occured. | 3/25/2014 1:32 PM |
| 5  | 1) Swap the days of the tutorial and lecture as I dont get time to look at the homework before monday 2) Better, more useful feedback on webassign as i have no feedback for a minor mistake that could lead me to the solution  | 3/25/2014 1:31 PM |
| 6  | I would like to get more problem solving skills.   | 3/25/2014 1:30 PM |
| 7  | Shorter lab period, more time for self-study. Homework be focused on concepts more than on calculations.   | 3/25/2014 1:30 PM |
| 8  | Improve the homework so that it can give you feedback and help you to learn.   | 3/25/2014 1:30 PM |
| 9  | Nothing! I think it is good!   | 3/25/2014 1:30 PM |
| 10 | More worked examples of using formula.   | 3/25/2014 1:29 PM |
| 11 | Can we have one Chinese tutor  | 3/25/2014 1:29 PM |
| 12 | Having less practicals and replacing that with more tutorial times.  | 3/25/2014 1:28 PM |
| 13 | 1. going through more examples in class about how to tackle different problems with slightly different concepts to help with problems with a twist that i just cant get my head around.  | 3/25/2014 1:27 PM |
| 14 | Change the lecture to Monday and the tutorial to Friday, this means we have the week to work on the webassign then come to the tute with questions instead of starting the webassign during the tute.  | 3/25/2014 1:26 PM |
| 15 | Providing useful links of exercises other than the book given. The book sucks at all.  | 3/25/2014 1:26 PM |
| 16 | Make an estimate which is close to our daily lives.  | 3/25/2014 1:26 PM |
| 17 | It has less time for the lecture on Friday morning. We cannot understand the whole staff in that short time. It is better to extend the time of lecture on Friday.   | 3/25/2014 1:26 PM |
| 18 | I cannot come up with anything. I think this course does not need any change, even leaving as it is now can be the best way for improving learning.  | 3/25/2014 1:25 PM |
| 19 | More effective reading materials which are directly related to homework can help us to improve our knowledge.  | 3/25/2014 1:25 PM |
| 20 | Slow it down this course it meant to be for people who have no experience in physics   | 3/25/2014 1:24 PM |
| 21 | nothing.   | 3/25/2014 1:24 PM |
| 22 | More tutorials on WebAssign covering the concepts in the homework could be very helpful.   | 3/25/2014 1:24 PM |
| 23 | Greater quantity and variety in components used in labs. Eg during the conservation of energy lab it would have been good to have the materials available to make a simple electric motor.   | 3/25/2014 1:24 PM |
| 24 | Maybe tutor could give us more interesting experiment in the course.   | 3/25/2014 1:24 PM |
| 25 | We can do more things in Monday's class rather than just do homework.  | 3/25/2014 1:24 PM |
| 26 | The part A of homework on Webassign has too much questions. Sometimes I felt that I was repeating work.  | 3/25/2014 1:24 PM |

| 27 | Tutorials in regards to solving formulas instead of "just complete homework", Example: expecting to have the homework questions partially done after the weekend really impacted my learning as i work on the weekend and maintain a house hold, this doesn't allow for much homework time on the weekend. Monday i would not have any of the new homework complete so i would not know what questions to ask about the formula. Webassign needs better feed back. | 3/25/2014 1:23 PM |
|----|--|-------------------|
| 28 | Nothing that I can think of that doesnt involve me adding about 8 extra hours to a week  | 3/25/2014 1:23 PM |
| 29 | Better Monday Tutorials. The Tutorials should be spent taking the class through specific aspects of the previous lecture with greater detail and examples than could be provided during the lecture. The tutorials should refine the points of the lectures and help to understand them.   | 3/25/2014 1:23 PM |
| 30 | I think the concepts of physics should be given more details, teaching slowly.   | 3/25/2014 1:22 PM |
| 31 | More feedback on ideas we have in laboratories.  | 3/25/2014 1:22 PM |
| 32 | The lectures on Fridays could be a little more in depth and it would be better if we could get more equipment for all the groups   | 3/25/2014 1:22 PM |
| 33 | LESS webassign questions.  | 3/25/2014 1:22 PM |
| 34 | So having less homework questions, with more varying difficulty would be a lot better.   | 3/25/2014 1:21 PM |
| 35 | More thorough lectures, incorporating worksheets to help in applying different/ new concepts to different stimulus.  | 3/25/2014 1:21 PM |
| 36 | Group work always has the potential to be challenging - in my group the same person does the lab report every week. It could be good to tell students a different person has to write it up each week.   | 3/25/2014 1:21 PM |
| 37 | Nil  | 3/25/2014 1:21 PM |
| 38 | The data in the homework is too complex. If the data in the homework will be simplified then I will get higher score.  | 3/25/2014 1:21 PM |
| 39 | Give us some last exam papaes  | 3/25/2014 1:20 PM |
| 40 | something that the groups of the labs are competing against each other   | 3/25/2014 1:20 PM |
| 41 | Show more about a new concepts, extend it and develop it further.  | 3/25/2014 1:20 PM |
| 42 | More tutorial sessions that are available to most of the students :)   | 3/25/2014 1:20 PM |
| 43 | It may be time consuming, but maybe we can do a couple of problem together as a class. Or in the tutorial, choose a couple of questions where most people in the class have troubles with and try to explain those question all together.  | 3/25/2014 1:20 PM |
| 44 | Communication with others in physics words   | 3/25/2014 1:19 PM |
| 45 | I really don't like webassign. but i suppose its good for calc work  | 3/25/2014 1:19 PM |
| 46 | more than 1 submission for webassign   | 3/25/2014 1:19 PM |
| 47 | Pick up the most difficult problems in the homework and show students how to solve them.   | 3/25/2014 1:19 PM |
| 48 | could you please put the right answers on wattle   | 3/25/2014 1:19 PM |
| 49 | -have more tutorial session -make the homework easier  | 3/25/2014 1:18 PM |
| 50 | Have a larger variety of equipment available to use in the labs.   | 3/25/2014 1:18 PM |
| 51 | More help with homework just homework session help. More help with understanding the theory written in the book  | 3/25/2014 1:18 PM |
| 52 | have a few practice questions during the lectures to show us how to solve a simple problem   | 3/25/2014 1:17 PM |
| 53 | More problem-solving skill teaching sessions and more attempts on Part B and Part C.   | 3/25/2014 1:17 PM |
| 54 | Working through more examples together, and not just the simplest examples, to create a stronger connection between the general concepts and the practical problems.   | 3/25/2014 1:17 PM |
| 55 | more time for consultation with lecturers, demonstrators another person to help answer questions in thursday tutorial  | 3/25/2014 1:17 PM |
| 56 | More tutorial options in the webassign. If they are not the same questions as those we're being tested on, that's fine, just a little more 'one-on-one' guidance (even if it's from a computer) would be super helpful.  | 3/25/2014 1:17 PM |
| 57 | *An additional lecture   | 3/25/2014 1:16 PM |
| 58 | problem solving sessions should be more intensive and straight forward to the points.  | 3/25/2014 1:16 PM |
| 59 | Offering more help on some of the more difficult or technical questions in the Quizzes   | 3/25/2014 1:16 PM |

| 60 | - If the exams aren't calculative, then maybe the WebAssigns should be a bit less, because it'll throw people off if they're assuming it's all maths - A big emphasis (I know we did the brief skills session) on lab journals. if it's 30% of the mark then we should be making sure we all are confident with how we write them | 3/25/2014 1:16 PM |
|----|---|-------------------|
| 61 | Perhaps spending more time on concepts during lectures, sometimes it seems we rush through sections of the presentations  | 3/25/2014 1:15 PM |

# Q22 in a few words please tell us how this course is different from other courses you are doing at ANU?

| #  | Responses   | Date              |
|----|---|-------------------|
| 1  | I just love it!   | 3/25/2014 4:41 PM |
| 2  | This course takes up a lot of time than any others  | 3/25/2014 1:50 PM |
| 3  | it doesn't necessarily rely heavily on the lecture materials as its not that much detailed  | 3/25/2014 1:49 PM |
| 4  | It more precisely reflects that you get out what you put in.  | 3/25/2014 1:42 PM |
| 5  | This course focuses on how we develop our skills in logical deduction and concepts, which have no absolute answer.  As a result, our learning helps us in gaining a common sense in daily life situation, which can be hardly acquired in other courses.                          | 3/25/2014 1:41 PM |
| 6  | Not as structured. Little information given, lots expected in the background.   | 3/25/2014 1:37 PM |
| 7  | Homework takes longer. Labs are more collaborative. Easier to get good marks.   | 3/25/2014 1:36 PM |
| 8  | just 3 classes per week   | 3/25/2014 1:36 PM |
| 9  | It is very different - the other courses focus much more on lectures and tutorials and less on practice of the questions. The concepts come before the equations and practice with them, whereas in this course the focus is much more on applying the concepts to the equations. | 3/25/2014 1:36 PM |
| 10 | It is much more intensive in terms of homework, but the labs are much better than others as we are able to figure out and do our own methods  | 3/25/2014 1:36 PM |
| 11 | Fun. Friendly. Not much intensive stress. Not enough lecture.   | 3/25/2014 1:35 PM |
| 12 | Much more practical based. Great for visual learners.   | 3/25/2014 1:35 PM |
| 13 | Much larger, homework not manually marked.  | 3/25/2014 1:34 PM |
| 14 | Many differences. More communication, more interesting and more homework:)  | 3/25/2014 1:33 PM |
| 15 | Effort in this course = K * what you get out I enjoy the self paced approach employed   | 3/25/2014 1:31 PM |
| 16 | This course is the most challenging course I am currently undertaking. My other courses are not challenging and require no real effort to achieve HD levels. This course requires much more time and hard work to keep up with the class.   | 3/25/2014 1:31 PM |
| 17 | N/A.(Because I'm an ANU College student)  | 3/25/2014 1:30 PM |
| 18 | It's the only course that I am doing outside the ANU college. I meet real uni students and this helps me a lot.   | 3/25/2014 1:30 PM |
| 19 | Fun, enjoyable and practical.   | 3/25/2014 1:29 PM |
| 20 | Much more involved, the room definitely helps with that. Unlike other courses this course isn't really isolated.  | 3/25/2014 1:29 PM |
| 21 | The lab sessions force one to think about physics concepts from a practical point of view, and offer a large variety of materials to find a way of demonstrating that.  | 3/25/2014 1:29 PM |
| 22 | To much calculus.   | 3/25/2014 1:29 PM |
| 23 | i always manage to laugh at least once in the course.   | 3/25/2014 1:29 PM |
| 24 | structured to have group work and has is more about the thought process and the understanding concepts rather than facts and equations  | 3/25/2014 1:28 PM |
| 25 | calculate   | 3/25/2014 1:28 PM |
| 26 | Labs takes significant time of the course for sure. I feel that we are generously given time to play around with our idea and experiments, even though some lab takes very little time to do. Also, we are given a lot of "toys" to play with.                                    | 3/25/2014 1:28 PM |
| 27 | This course is very different to many of the course I am studying at Anu as it is a lot more self-directed then my other courses, and also a lot more homework, so preferably less homework would. be better.   | 3/25/2014 1:27 PM |

| 28 | Lectures are very different, feels as taught they are much more vague than other subjects. Amount of homework is very large. Tutorials are also very different. Other subjects go through concepts learnt in lectures, while physics are just going through homework.  | 3/25/2014 1:27 PM |
|----|--|-------------------|
| 29 | There are too many homework every week i think.  | 3/25/2014 1:27 PM |
| 30 | The homework is time consuming. The practicals are funner and require more critically thinking   | 3/25/2014 1:27 PM |
| 31 | This one takes up way more time and there is far too much homework   | 3/25/2014 1:26 PM |
| 32 | The population of student is more than foundation course, more teamwork can help me improve English.   | 3/25/2014 1:26 PM |
| 33 | Because I am study in the bachelor of actuarial studies, my other courses are complex in theories and math stuff. The form of taking classes are totally different with phys1001. I felt it is interesting to do some experiment by ourself.   | 3/25/2014 1:26 PM |
| 34 | More active, more fun in the activities, and more team work is required.   | 3/25/2014 1:26 PM |
| 35 | Eh, it gives students freedom to show their intelligence, it's interesting to see the demonstration of the physics phenomenon in Lab classes.  | 3/25/2014 1:26 PM |
| 36 | I am a ANUcollege student.   | 3/25/2014 1:26 PM |
| 37 | More hours, cheaper book   | 3/25/2014 1:26 PM |
| 38 | It doesn't have a small tutorial class that you attend It has a lab and only one lecture per week It's more interactive  | 3/25/2014 1:25 PM |
| 39 | Having the long lab session and the group nature of the lab makes it different from my other courses (I'm doing a double degree, so not all science courses). Having the homework take such a significant amount of time is also different from my other courses. My other courses have more time in class, and less time spent on the homework outside of class. e.g. I have maths classes four days a week, as well as a tutorial, but the weekly WebAssign quiz only takes an hour. | 3/25/2014 1:25 PM |
| 40 | *More concise emphasis on concepts *Shorter contact hours, longer homework effort  | 3/25/2014 1:25 PM |
| 41 | More hours in team group.  | 3/25/2014 1:24 PM |
| 42 | much more practical and less lecture based.  | 3/25/2014 1:24 PM |
| 43 | This course encourages more independence and creative learning.  | 3/25/2014 1:24 PM |
| 44 | Well, I am now studying in the ANUC, andquite a lot differences i suppose. Totally upon myself.  | 3/25/2014 1:24 PM |
| 45 | My other courses are more about paper practice, but this course gives me chance to practice and use the theory I learnt in real life.  | 3/25/2014 1:24 PM |
| 46 | thoughtful ,energtic, open and free  | 3/25/2014 1:24 PM |
| 47 | much more hands on work than in other classes  | 3/25/2014 1:23 PM |
| 48 | I dedicate over half my time studying for Physics, and I am a full time student with 4 courses. Physics is much more practical than my other courses - and building things in the labs is a nice change to just studying on paper.   | 3/25/2014 1:23 PM |
| 49 | It's more fun! and practical :)  | 3/25/2014 1:23 PM |
| 50 | Much more mathematics involved, my other courses are biology courses (neuroscience, immunology, biochemistry)  | 3/25/2014 1:23 PM |
| 51 | this course is great because it allows us to be more creative in how we approach things, and we are able to take risks, without the fear of failure.   | 3/25/2014 1:22 PM |
| 52 | There is more hands on activities in this class and less theory lectures. There is a lot more weekly homework.   | 3/25/2014 1:22 PM |
| 53 | More hours for lab, less hours for lectures, not conventional like other courses such as chemistry, math or biology.   | 3/25/2014 1:22 PM |
| 54 | A lot of individual learning Not many worked examples very hands on Theory is backed up by practical application   | 3/25/2014 1:22 PM |
| 55 | Most prac heavy course. And has most homework.   | 3/25/2014 1:22 PM |
| 56 | More active and creative.  | 3/25/2014 1:21 PM |
| 57 | long time Lab  | 3/25/2014 1:21 PM |
| 58 | I really love the teamwork we do in lab  | 3/25/2014 1:21 PM |
| 59 | It's a lot less full on in terms of the lectures and the tutorials, much more relaxed environment (which is great). The labs are less structured and require interpretive thinking to get them done rather than following the manual. And the main time spent outside is doing WebAssign work, which is far less in my other subjects.   | 3/25/2014 1:21 PM |

| more practical than other courses  | 3/25/2014 1:20 PM   |
|--|---|
| Less help with homework or other assessment . Comparative . More work .  | 3/25/2014 1:20 PM   |
| The Facebook group Is incredibly useful and the opportunities for teamwork and in much greater quantity  | 3/25/2014 1:20 PM   |
| Less lecture and tutorial time, more lab time. More learning happening in these labs that is directly related to the things we're being tested on. | 3/25/2014 1:20 PM   |
| The lab is much longer than other courses'   | 3/25/2014 1:19 PM   |
| a lot more hands on, less lecture time. more practical rather then theoretical.  | 3/25/2014 1:18 PM   |
| This course is far more hands on than other courses.   | 3/25/2014 1:18 PM   |
| More challenging, much interesting with practical demos  | 3/25/2014 1:18 PM   |
| Using own ideas to find solutions to problems.   | 3/25/2014 1:17 PM   |
| The concepts learned are put into practice more often than other courses.  | 3/25/2014 1:17 PM   |
|  | Less help with homework or other assessment. Comparative. More work.  The Facebook group is incredibly useful and the opportunities for teamwork and in much greater quantity.  Less lecture and tutorial time, more lab time. More learning happening in these labs that is directly related to the things we're being tested on.  The lab is much longer than other courses' a lot more hands on, less lecture time. more practical rather then theoretical.  This course is far more hands on than other courses.  More challenging, much interesting with practical demos  Using own ideas to find solutions to problems. |

# Q23 How do these differences impact on your learning?

| #  | Responses   | Date              |
|----|---|-------------------|
| 1  | I learning physics with my interests  | 3/25/2014 4:41 PM |
| 2  | Don't get to spend enough time on any other subjects  | 3/25/2014 1:50 PM |
| 3  | It's very unusual because it doesn't contribute to my learning style. It's very hard to grasp what we actually need to learn and memorise. To be honest, I don't like it because it's like learning another new language and pretty much you don't know what we are doing. The Webassign puts too much on calculations and formulas that personally I think I would eventually forget about it. Given that I have 0 knowledge on physics, and trying to learn these things and doing estimations and stuff, really puts me off because I thought this course was for people who doesn't really have the knowledge on physics and it seems like we need to have some assumed knowledge in order to succeed in this course. | 3/25/2014 1:49 PM |
| 4  | The practical nature of the course better motivates learning.   | 3/25/2014 1:42 PM |
| 5  | We can train up our ability to estimate can observe daily life changes that affect us.  | 3/25/2014 1:41 PM |
| 6  | More time spent on understanding where I need to go rather than getting there.  | 3/25/2014 1:37 PM |
| 7  | Overall these things improve learning, but it would be nice to have more feedback on homework.  | 3/25/2014 1:36 PM |
| 8  | have more time for self study   | 3/25/2014 1:36 PM |
| 9  | I am finding the other courses I am taking - Math 1013, Chem 1101 and Bio 1003 - much easier to understand than this course, but this may be due to the prior experience with other subjects, I would learn more easily if we had an extra lecture on Monday instead of the tutorial, and we could take more time for each concept.   | 3/25/2014 1:36 PM |
| 10 | It allows me to think more based on what i think may work, not just following a set of procedures where I need to memorize certain steps  | 3/25/2014 1:36 PM |
| 11 | Having fun and friendly lecturer is good for me.  | 3/25/2014 1:35 PM |
| 12 | I am a visual learner, so the practical demonstrations and diagrams are very helpful. The practical part of the practicals are very helpful, however do take up a lot of time to study for other subjects.  | 3/25/2014 1:35 PM |
| 13 | More things going on at once, smaller chances for gaps in understanding to be diagnosed and attended to.  | 3/25/2014 1:34 PM |
| 14 | Make me understand deeply in this course and adapt the western learning style.  | 3/25/2014 1:33 PM |
| 15 | I enjoy this approach. I feel free to explore concepts extracurricular to the actual course.  | 3/25/2014 1:31 PM |
| 16 | The difficulty of this class allows me to challenge my intellect and expand my knowledge in ways my other courses do not.   | 3/25/2014 1:31 PM |
| 17 | N/A   | 3/25/2014 1:30 PM |
| 18 | It seems that I always finish physics homework at first since I took this course. Besides, I think more critically.   | 3/25/2014 1:30 PM |
| 19 | They do not make me bored in learning. They keep me learning anything covered in the course and lab session eagerly.  | 3/25/2014 1:29 PM |
| 20 | A more relaxed learning environment, things come quicker and easier when trying the figure them out.  | 3/25/2014 1:29 PM |
| 21 | Different way of considering problems   | 3/25/2014 1:29 PM |
| 22 | Nothing   | 3/25/2014 1:29 PM |
| 23 | makes me enjoy the class more, making me more focused.  | 3/25/2014 1:29 PM |
| 24 | in lab i found that experiment result usually different with theoretic answer, therefore, we have to analysis data and devices to figure out what the error could be produce.   | 3/25/2014 1:28 PM |
| 25 | I learn much more from these interactive activities   | 3/25/2014 1:28 PM |
| 26 | Actually, it doesn't bring too much difficults. I just need speed more time using calculater.   | 3/25/2014 1:28 PM |
|    | 1   | 1                 |

| 27 | It gives us lots of freedom and requires quite a bit of creativity. At the same time, it's harder to tie the lab to shed light on what we learn in class from the lecture. For example, during the week where we learn about spring an string, the lab asks us to find the weight of an object. A group came up with the idea of using torque. This is not yet taught in the class, which might be your intention to let us go out and beyond for our experiment, but at the same time we cannot practically apply what we already learn in the lecture to do our lab. | 3/25/2014 1:28 PM |
|----|--|-------------------|
| 28 | Less homework please :)  | 3/25/2014 1:27 PM |
| 29 | I'm not learning concepts, but how to try and finish homework on time. I am also very stressed every week.   | 3/25/2014 1:27 PM |
| 30 | I need to think these questions by myself.   | 3/25/2014 1:27 PM |
| 31 | learn more about the physical application of formula the homework ends up causing confusion and impacting my ability to learn  | 3/25/2014 1:27 PM |
| 32 | Makes me a better learner but more tired and stressed in the process   | 3/25/2014 1:26 PM |
| 33 | Let me think more and improve my study skill.  | 3/25/2014 1:26 PM |
| 34 | Make my study not rigid , at least help me to take a fun time among my complex and boring courses.   | 3/25/2014 1:26 PM |
| 35 | The differences force my to adapt and challenge myself, which is an experience I found very enjoyable, as it inspires me to learn to think in a different way, rather than just providing knowledge to me.   | 3/25/2014 1:26 PM |
| 36 | These differences bring up my interest of physics, give me motivation to explore and discover the physics world. Teamwork helps me make new friends and improves my discussing ability.  | 3/25/2014 1:26 PM |
| 37 | I am a ANUcollege student.   | 3/25/2014 1:26 PM |
| 38 | Makes me more focused on this class, bit more stressed   | 3/25/2014 1:26 PM |
| 39 | I find it more difficult to work through so much material on my own and try to create the connection between the concepts and the practical problems of the homework and get a bigger picture of all the material.   | 3/25/2014 1:25 PM |
| 40 | *Time demand of homework is 2-4 times that of other courses, challenging to complete everything *Only 1 lecture puts emphasis on self-directed learning which, for fundamental concepts, can take significantly longer to process than when explained by a lecturer *  | 3/25/2014 1:25 PM |
| 41 | No different impacts in my mind.   | 3/25/2014 1:24 PM |
| 42 | I think i is good, i challenges a different part of my brain during the practical exercises and then backs it up with the quizzes.   | 3/25/2014 1:24 PM |
| 43 | It makes me more disciplined in my work as well as to help me think out of the box more.   | 3/25/2014 1:24 PM |
| 44 | Help me to become a independent learner and improve my group working skills. Make me want to visit the library in free time, haha.   | 3/25/2014 1:24 PM |
| 45 | It gives me a better understanding of what I've learned in class.  | 3/25/2014 1:24 PM |
| 46 | It makes me enjoy this course and physics.   | 3/25/2014 1:24 PM |
| 47 | it helps my learning because I learn better when I'm doing things rather than hearing about them   | 3/25/2014 1:23 PM |
| 48 | Especially coming up to the exam period where the course load in other courses gets heavier, I cant devote enough time to Physics to do as well as I wish without impacting on my other courses.   | 3/25/2014 1:23 PM |
| 49 | I don't fall asleep  | 3/25/2014 1:23 PM |
| 50 | Different styles of learning, eg biology is more involved in processes, physics is more interpretation of concepts and applying to problems. I am used to learning processes so difficult to adjust to learning physics.   | 3/25/2014 1:23 PM |
| 51 | allows me to know the concepts from all different angles, not just how the textbook taught me.   | 3/25/2014 1:22 PM |
| 52 | I'm spending a lot more time on this class trying to complete the homework on time which impacts on the amount of time I have to do work in other courses. As there is only one theory lecture I feel like I'm not understanding the content as much as in other classes.  | 3/25/2014 1:22 PM |
| 53 | Builds self-learning skills, team work skills, and emphasizes strongly on concepts rather than just knowing equations.   | 3/25/2014 1:22 PM |
| 54 | I retain information   | 3/25/2014 1:22 PM |
| 55 | Pracs allow me to understand how and when to apply concepts. The homework tests my technical understanding.  While there is more in this course than others for the most part it is helpful.   | 3/25/2014 1:22 PM |
| 56 | Let me more willing to communicate with others and come up with more ideas to solve the problems   | 3/25/2014 1:21 PM |

| 57 | It is too long that it is hard to stick to  | 3/25/2014 1:21 PM |
|----|---|-------------------|
| 58 | helps me a lot  | 3/25/2014 1:21 PM |
| 59 | - The WebAssign is really unfortunate in the sense that it almost doesn't help you when you're wrong, and given the harder questions only have one answer input, it makes it just disappointing to see you get something wrong in B or C. Whereas in my chemistry class, the idea is to finish the quiz, and you get far more attempts and hints/tutorials for the difficult questions The lab learning means you leanr how to apply the concepts you've just learnt which is good and the relaxed environment makes it easier to learn | 3/25/2014 1:21 PM |
| 60 | easy to see concepts  | 3/25/2014 1:20 PM |
| 61 | You have to put in more effort in order to pass the requirements  | 3/25/2014 1:20 PM |
| 62 | I am able to help and receive help much more fluidly and contribute to the my personal learning and the learning of my peers  | 3/25/2014 1:20 PM |
| 63 | I find it much easier to understand things conceptually once we've had a chance to experience the topics in the lab.  | 3/25/2014 1:20 PM |
| 64 | No much, just have to put more time and effort.   | 3/25/2014 1:19 PM |
| 65 | I think they are better as it shows what we will need to do when we enter the workforce rather then just how to solve a problem   | 3/25/2014 1:18 PM |
| 66 | better understanding and better interest in Physics   | 3/25/2014 1:18 PM |
| 67 | They allow me to see how the concepts are actually applied.   | 3/25/2014 1:17 PM |

# Q24 How could the use of software and other technologies in the course be improved to support your learning?

| #  | Responses   | Date              |
|----|---|-------------------|
| 1  | Definitely caculator  | 3/25/2014 4:41 PM |
| 2  | Im unsure if videos of the experiments shown at the end of labs are available to see again, perhaps on the Facebook group.  | 3/25/2014 1:42 PM |
| 3  | If we are able to use some Lego robots to formulate our data in experiments, we can have more precise figures and information to help us understanding the concepts behind.   | 3/25/2014 1:41 PM |
| 4  | more worked examples online.  | 3/25/2014 1:37 PM |
| 5  | The use of software and technology is good  | 3/25/2014 1:36 PM |
| 6  | understand the knowledge more deeply  | 3/25/2014 1:36 PM |
| 7  | Software and technology is already used well in the course.   | 3/25/2014 1:36 PM |
| 8  | Better feedback on webassign - other than that the technologies and software used are very good   | 3/25/2014 1:36 PM |
| 9  | I prefer hard copy textbook to soft copy one. It is very tiring to look at the screen all the time.   | 3/25/2014 1:35 PM |
| 10 | The technologies used are great already, do not change it. Especially the facebook page   | 3/25/2014 1:35 PM |
| 11 | Web assign easier to use, training examples for iPad software (eg video physics)  | 3/25/2014 1:34 PM |
| 12 | Really useful!  | 3/25/2014 1:33 PM |
| 13 | iPad apps are cool. Video physics etc   | 3/25/2014 1:31 PM |
| 14 | The replacement of Facebook with an app made for this course would greatly support my learning. I do not use Facebook frequently and having a large portion of support for this course on Facebook makes it difficult for me to access. An app that acted as a forum for the members of this course in the same way as Facebook does would be beneficial.                 | 3/25/2014 1:31 PM |
| 15 | From the physics video software we could learn how to visually show the critical concept of physics. I could also improve my measurement knowledge.   | 3/25/2014 1:30 PM |
| 16 | I can model in my mind how is going on based on the concepts that I have learnt by showing experiments.   | 3/25/2014 1:30 PM |
| 17 | It helps me to spend time on studying more efficiently.   | 3/25/2014 1:30 PM |
| 18 | Easy to calculate and easy to measure.  | 3/25/2014 1:30 PM |
| 19 | Much more availability of these technologies can improve the course. If there are enogh number of iPads for each student, it would help learning a lot.   | 3/25/2014 1:29 PM |
| 20 | Probably the iPad software, it is good but very confusing. A more convenient and easier to compile and submit the prac reports.   | 3/25/2014 1:29 PM |
| 21 | Make my homework and assignment more easily to finish.  | 3/25/2014 1:29 PM |
| 22 | idk   | 3/25/2014 1:29 PM |
| 23 | software and other technology can visualise what happened in physics learning and impressed us and easy to memory   | 3/25/2014 1:28 PM |
| 24 | We used the ipad technology/applications to assit with the measurements of the laboratory experiments   | 3/25/2014 1:28 PM |
| 25 | I feel like there are a lot of practical use for the physics we learn in class. During the demonstration part of the lab, maybe introduces technologies that were created using the physics we learn, or maybe allow us to use some of those technology by ourselves. Also, phet.colorado.edu is a very good site to learn from. We can exploit much more from that site. | 3/25/2014 1:28 PM |
| 26 | Less homework please :)   | 3/25/2014 1:27 PM |

| 27 | Software and technologies are good.  | 3/25/2014 1:27 PM |
|----|--|-------------------|
| 28 | Such as ipad video app, i think that is very good for our learning.  | 3/25/2014 1:27 PM |
| 29 | I prefer pen, paper and calculator Online homework needs to have more feedback.  | 3/25/2014 1:27 PM |
| 30 | Web assign is far too impersonal   | 3/25/2014 1:26 PM |
| 31 | I still not very good at using software.   | 3/25/2014 1:26 PM |
| 32 | Well, maybe it exercise my searching skills?   | 3/25/2014 1:26 PM |
| 33 | The software and other technologies help minimize the time required for certain work; such as, recording, timing, writing, which would otherwise be very time consuming for students, and students would have less time for actual educational activities; for example, experiments, homework.   | 3/25/2014 1:26 PM |
| 34 | The use of software helps students calculate some statistics and understand the phenomenon.  | 3/25/2014 1:26 PM |
| 35 | We can use loptop and ipad to support my learning  | 3/25/2014 1:26 PM |
| 36 | More in depth explanations of formulas and applications with examples than in the book   | 3/25/2014 1:26 PM |
| 37 | I've liked having the 'tutorial' practice questions included for some of the questions on the WebAssign quiz, and found they've really helped me, as they allow me to work through the problem and understand why the answer is the answer before tackling the real problem. I can't think of any way that technology could be used more effectively to support my learning. | 3/25/2014 1:25 PM |
| 38 | Learn how to search the information more scholarly.  | 3/25/2014 1:24 PM |
| 39 | videos explaining concepts or showing them occuring in the physical world.   | 3/25/2014 1:24 PM |
| 40 | More demo's during classes as they are epic.   | 3/25/2014 1:24 PM |
| 41 | Mainly help us to recording, analyzing, graphing and providing many useful information on web. Help us to learn more ourselves.  | 3/25/2014 1:24 PM |
| 42 | I think it's already very efficient, and don't have any suggestions yet.   | 3/25/2014 1:24 PM |
| 43 | None   | 3/25/2014 1:24 PM |
| 44 | I don't really know  | 3/25/2014 1:23 PM |
| 45 | Nil.   | 3/25/2014 1:23 PM |
| 46 | ?  | 3/25/2014 1:23 PM |
| 47 | The video physics app could be a lot easier to understand so it is more usable.  | 3/25/2014 1:22 PM |
| 48 | Access to computers, consistent wi-fi connections or internet in order to use the ipad to send data from videophysics or other apps to our own computers/laptops   | 3/25/2014 1:22 PM |
| 49 | The function of analyzing data and graphing.   | 3/25/2014 1:21 PM |
| 50 | To measure time and graph the velocity   | 3/25/2014 1:21 PM |
| 51 | helps me a lot   | 3/25/2014 1:21 PM |
| 52 | - facebook was a great idea which worked well I'm not sure if WebAssign is assisting in learning or just testing your knowledge and calculations   | 3/25/2014 1:21 PM |
| 53 | webassign, more than 1 attempt if webassign is incorrect we should be able to see the correct answer   | 3/25/2014 1:20 PM |
| 54 | iPad make easier to get time or other sort of measurement for the course   | 3/25/2014 1:20 PM |
| 55 | More live calculations and methods of doing the concepts studied in class either online in mini-lecturettes (like computer science and engineering) would greatly expand on the concepts explored in the Friday lectures   | 3/25/2014 1:20 PM |
| 56 | Again, more tutorial options online.   | 3/25/2014 1:20 PM |
| 57 | Google, iPad apps, calculators, and so on.   | 3/25/2014 1:19 PM |
| 58 | better understanding and helps with memory   | 3/25/2014 1:18 PM |
| 59 | By allowing us to time experiments easier.   | 3/25/2014 1:17 PM |