Informatics Student Course Feedback 2017/18

http://www.inf.ed.ac.uk/teaching/surveys/2017-18

This report contains feedback from students about a course taught in the School of Informatics during the 2017/18 academic year, in response to the following questions:

- What would you say to students interested in taking this course?
- What did you find most valuable about the course?
- What improvements, if any, would you make to the course?
- Please add any other comments you have about workshops and tutors

Each course organiser receives this report as well as statistics on multiple-choice responses. All these reports, together with student feedback about individual members of teaching staff, are collected and sent to the Director of Learning and Teaching.

Please note that these are personal responses from individual students: some courses only have a few responses and a small sample can be unrepresentative.

Stereotyping and bias, especially unconscious bias, is a serious concern in any survey gathering personal responses. All students received the rubric below before completing the surveys, and you can read a brief introduction to issues of unconscious bias on the university web pages at http://edin.ac/2iypZBv

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Rubric given to all students taking the end-of-course feedback survey

We value your opinions on the courses you take here at the University, as they allow us to shape future delivery and development. We welcome constructive comments about your courses, whether positive or negative, and ask you to give details about any issues in order to help the course organiser to understand and address them.

We encourage you to be aware of the potential for bias in the completion of these questionnaires, so we have developed resources which may be helpful to you:

- Equality, Diversity and Unconscious Bias (http://edin.ac/2iypZBv)

You also have a responsibility to provide feedback in a manner which does not breach the University's Dignity and Respect Policy:

- University of Edinburgh Dignity and Respect Policy (http://edin.ac/1Cq0VZY)

The results of the questionnaires will never be analysed in a way that seeks to identify individual students from their responses. However, should you wish to remain anonymous, please do not identify yourself in your answers to the survey questionnaire implicitly or explicitly.

Comments Report

What advice would you give to a student taking this course in future?

- Be prepared to have it take up way more time than you expect.

- Be very careful when trying to choose this course. It does give you something but personally I don't think I gain much. Maybe it is because robotics is a really board area.
However, doing the practical lab really trained my teamwork and the spirit to work in extra hours, instead of making me have more practical knowledge.

- Do everything incredibly early as the hardware will break constantly and you will be stuck without working parts with the deadline for presentation quickly approaching.

- Don't waste time on too many tests of your robot without considering why the test failed.

- For the lab session, make sure to have a clear idea about your robot to reduce time waste on rebuilding. Also, for theory, make sure, you have a fundamental knowledge of Bayesian probability.

- I'd warn him/her and advise him/her to NOT take this course at any cost. I would, however, suggest him/her to take a 100% practical robotics course if one is made available.

- It is a starting point to a big universe

- It's quite intense at the beginning, but pace yourself and learn as much as you can.

- Make lots of notes when making the robot

- Practical's will take a lot of time, but they are fairly fun and rewarding. Recommend taking the course.

Comments Report

What did you find most valuable about the course?

- Board area of Robotics knowledge was given and the framework is clear for each section. But hopefully it can be deeper for some particular parts such as control.

- Building the robot by ourselves.

- Good lectures and good material for the course. Tutorials have been really useful for a proper understanding of the studied theory

- Hands on experience

- I think the only positive from this course was Zhibin Li, he was a great lecturer.

- Nothing other than the labs were valuable to me.

- Practical experience building autonomous robots.

- The lab work helped in getting a better grasp of the theory we were studying.

- The lecture content

- The practical and tutorials helped to get a grounded knowledge on the techniques and some principles of robotics. It was fun too.

- The practical put concepts learned in class in a real-world atmosphere. The course gives a nice introduction on robotics which is nice for someone without a background in the area.

- The practical.

- the practical

Comments Report

What improvements, if any, would you make to the course?

▪ Change the class room, and get a microphone for the professors

▪ Firstly I would provide hardware that is actually reliable and works. The amount of issues with hardware was absolutely ridiculous, therefore delaying any development of the robot to a later date as no testing was able to be done on the robot. This was extremely frustrating as we would have to debug what piece of hardware was wrong ourselves, place it in a box and just wait till we had it returned to find that it wasn't that piece of hardware and we would have to debug further. At the start of the course we may as well have placed almost all of the hardware in this box.
Secondly the tutorials for some reasons started 2/3 weeks too late to actually give any useful information on time to add into the robot code, especially when there are other assignments for other classes going on.
Thirdly the lecture room was completely inadequate, having a lecture in a computer lab was pretty ridiculous and it make it very difficult to follow the content as other students would arrive to work in the lab and would not stay quiet.
Fourth, I think the order in which the lectures were given was not very helpful as many other the things that could have been excellent in the labs was not given until lectures very late on in the course.
Finally, as stated above since the tutorials started too late and the order of the lectures was not helpful in the labs, it was as if this course was actually 2/3 different courses with very little cohesion between them.

▪ Fix robot parts please
Also give more time for the final report - Thursday sessions are given Monday deadline, which is a bit unfair

▪ Improvements I would make to the course:
1.   A proper lecture hall
2.   Working Mic with Voice amplifier
3.   Whiteboard with pen and duster
4.   Recording facilities
5.   Availability of recordings on the website
6.   Discussion forum
7.   Integration with LEARN
8.   A good lecturer/teacher
9.   Interactive two-way lectures (Both students and lecturer question and answer)
10.   Tutorials aligned with lecture
I wondered many times, if there's even ANY level of test for teaching made for choosing TAs and lecturers. Answering questions and knowing stuff doesn't make someone a teacher or lecturer, teaching does. If I were to test, I would make the lecturer teach me a topic completely unknown to me and how much I understood myself and the level of interaction would give how good the teacher/lecturer was.
It is notable that a good lecturer should allow students to ask questions and at the same time, ask questions to students to ensure they understood. I would improve the lectures by having both these things for every single topic explained/briefed, effectively making two way interactions and also by having short group discussions/activities to encourage interaction among students. This can compensate the lack of individualized attention which for courses with more enrolments may not be always given to the extent students would expect.
Also take into consideration that human eyes are good at detecting "changes" in what we see as opposed to grasping all the details in a static image, the very reason why using PPTs is a bad idea for teaching while the same content when written on a white/black board would make the same set of observers grasp a lot of details due to changes in board every second. Videos and Board-based teaching complement each other, combining both would give the best experience for learner. In particular, multiple one minute hyperlapses can be recorded and shown to students in lectures to tell how much time something takes and what it would result in.
If you plan to conduct RSS the same way we had, I strongly suggest disconnecting the theory part of the Robotics Science and Systems from the labs, make RSS labs as a separate course while discarding the theory course lest the reputation and standard of the prestigious university should plummet.

▪ Instead of practical sessions, a theory based discussion of topics as a tutorial would have been more productive. There was a lack of doubt clearing sessions.

▪ Lecture recordings would be very useful, as there's a lot of information to take in and try to note down.

▪ The practicals take a lot of time, and can be frustrating, but also rewarding. Updated equipment could be nice.

▪ More practical examples and solutions during lectures on the techniques learnt.

▪ Providing more robust hardware.

▪ Reduce the content of the course to really fundamental topics in Robotics and go in depth in them. Too many topics have been tackled but none of them with a proper degree of detail.

Comments Report

What improvements, if any, would you make to the course? (continued)

▪ The practical was a disaster. The organisation was a complete mess and the hardware given to students was terrible and prone to breakage. Give students the ability to get wires and connectors etc from the cupboard themselves without having to wait 24hr to be given a connector.

▪ The room for lectures is not so satisfying, we have been having lectures in a large lab room where monitors usually get into our way. Our lecturer requested a white board but it was ready after almost 6 or 7 weeks, how amazing things can be!
Dr Zhibin Li is a passionate lecturer but he needs to improve his way of giving a lecture. It is sometimes hard to follow him because his voice is not loud enough and he keeps the same tone for almost all sentences he says.
The slides of this course are hardly helpful, not too much to follow if we do not use a lot of extra materials, especially the first 3 lectures given by professor sethu.vijayakumar. I even doubt that some slides are directly copied from other's works when searching the Internet for Kinematics slies.
It took us a huge amount of time to get the practical lab done. Although we got satisfying grades for labs' demonstration, I don't think I learnt much doing this lab. My team spent at least 30% of total time dealing with Legos and hardware issues which I think should be gaining nor for the marks. I dare to say that if spent this time in improving my machine learning courses I would get much better academic rewards.

▪ The tutorials could be a bit better structured. Labs could also be a bit more structured with more input from lab assistants.

▪ Tutorials were really boring and without any explanation at all. I don't see the point to finish a code which was started for other person, everybody has different ideas about ho to write the code, I spent more time trying to understand rather than working. Could be good if we need to work with codes(I am totally agree with that) if we have kind of steps to follow in order to understand the results from the code. Tutorial orientation paper is needed

Comments Report

Please add any other comments you have about workshops and tutors

▪ I enjoyed the labs. I believe that more guidance during the initial weeks and more tips and tricks would accelerate the performance of teams and help them achieve even more. With that some more interesting objectives could be added. Each team's build could be closely inspected every single week and feedback on the things added/removed/modified could be given on why we should use something and why we shouldn't use something, and could be given advise on whether we are headed in the right direction or not, and if we are keeping up our pace to complete the objectives in time. Also, replacement parts should be readily available for the students..

▪ What would make the labs great:
1) I also feel that the equipment provided in the labs were outdated for 2017 - people are using gyros, accelerometers for basic tasks, in fact the slides do talk about them, but we didn't get a chance to work with them. Upgrading the kits would be great.
2) It was great that we had to code in a programming language like python which is open source and it takes less time to write what we think as code. However, it would be great if we worked with open source hardware too, so even after finishing the labs, we can plan to use the code on a rasp pi sitting at home and have add-ons to take it to a next level.
3) Industry aligned lab equipment and objectives would, I think, make the labs not just more relevant to industry, but also interesting and awesome.

▪ The tutorials were essentially either read through code and try to understand it or copy code from the lecture slides.
The labs were somewhat more useful as we could ask questions on how to complete the task.

▪ The tutors are great, the lecturers too. They were available to answer questions and provide clarifications.

▪ Tutorials were a bit to ad-hoc

▪ Very helpful tutors.

▪ We do not have these sections. But our demonstrators in the practical labs are helpful in explaining the goals we are supposed to get. Henrique Ferrolho, one of our demonstrators, was very impressive for his coming to help on weekends when our hardware were having failures while the deadline was close. I think all my teammates would appreciate that as well.

▪ Workshop very good, tutors so professional specially Vlad.