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

- Avoid at all costs if possible
- BE 1000% FOCUSED DURING THE ENTIRE LECTURE (you are still going to lose some parts...)
- Become very familiar with the informatics base and the tutors who work there as they are usually better at explaining and helping with the coursework than the lecturer.
- Do the assignments and ask friends for help, unlike programming, computation and logic is not necessarily an individually learned skill.
- Do the past paper as possible as you can. Don't feel scared when you don't understand what lecturer talking about. Because most of us don't understand the lecture at the first time :)
- Doing the tutorial work before going to the tutorial helps you understand everything. Not doing the tutorial work makes the entire tutorial a waste for you.
- Don't
- Don't skip any lecture
- Don't worry about some knowledge you cannot understand just after lectures.
- Don't bother taking it if you can avoid it
- Have an understanding of logic beforehand
- If you are not good in logic and/or you do not have basic understanding of boolean algebra, do not take it. Otherwise, good luck.
- Infbase is a helpful resource
- It's foundation of many areas especially in computer science.
- Make sure that if something isn't understood, you go back through the posted slides at your own pace to work it out rather than trying to move on without it.
- Make sure to understand all the procedures used to solve a problem in this course. Furthermore, read a bit beyond the course to see how this stuff is applied in real life.
- Make sure you go over the tutorial work before going to the tutorial as there isn't enough time to cover the tutorial activities as well as go over the previous homework. I would also advise on attending INF PALS.
- Not sure
- Pay attention constantly. Even being distracted for 2 seconds could mean the difference between understanding the material, or not understanding it
- Pay attention in lectures. It's tempting to be making memes on the group chat but just paying attention will save you a lot of time and headaches trying to understand CL.
- Practice questions and the theory will begin to make more sense. Doing the weekly reading is very helpful.
- Read the book, which they'll tell you isn't necessary, but is, because the lectures aren't helpful. Try as much as you can with the tutorials.
- Revise in groups of friends, because nothing makes sense first time round or ever, but it feels a bit better to fail with others
- Self-study will save you
- Since a lot of Boolean algebra is assumed knowledge, read some of MML before you come to university.
What advice would you give to a student taking this course in future? (continued)

- Solve a doubt as soon as you get stuck don’t wait till the end
- Spend more time on this course compare to the others
- Stay on top of the work because if you fall behind it is difficult to catch up as the course is very fast paced
- Take another logic course first.
- Take your time completing the tutorials, you can learn a lot by thinking about the exercises
- This is an awesome course! But for the first few weeks you'll feel otherwise. Keep working at it, use all the resources available
  - (InfBASE, Piazza, etc), and it'll become enjoyable.
- To pay attention to lectures, it can be quite boring and confusing, but going over all of the course material in the last three days before the exam is a headache and more. And just work right from the start.
- Try to understand the purpose of what you're doing and why you do certain steps i.e. Demorgans and implication as doing this will make the course much easier and you'll see the bigger picture
- Try to wrap your head around the tutorial exercises and take a look at past exams earlier in the semester.
- Use the MML textbook for readings, as you will get much more out of this than anywhere else. Go to InfPals every week as the seconds years are very good at explaining things. Do all the tutorial questions.
- Watch the privies years lecture videos.
- Wikipedia is GOOOOOOOOOD!!!
- Work through lectures thoroughly going through examples which are shown
- You will understand it at the end of the course
- be prepared to engage in self-study
- Do every week's tutorial work one week late for better understanding.
- go to infbase for actually clear explanations
- Try to understand something. Video replay is very helpful
What did you find most valuable about the course?

- 4man
- Almost nothing positive to say but if I had to pick one thing, the content itself provides a nice context when learning programming in other modules.
- Computation and Logic... I guess
- Course was useless. Had no real value.
- Dave Cochran.
- Finite state machine.
- Finite state machines (last syllabus contents)
- Found the tutorials the most valuable
- Helping me more understanding of Programming
- I don't see the point of this course.
- I get some logics.
- I have a better understanding of Functional Programming.
- I'm not sure how to describe it, but I guess the content? It's very interesting and seems to me to have a lot of potential, almost like learning addition.
- I've not studied logic to this complexity before, so it was nice to be challenged
- Improve my self-learning ability.
- It helped further my knowledge.
- It makes me think things more logically.
- It was an excellent introduction into the subject area, and I really enjoyed the challenge of it.
- It was very nice that theory was explained at the beginning of tutorial sheets.
- Learning about finite state machines was great, I knew almost nothing on the topic apart from knowing that it existed.
- Learning new ways to look at problems with logic
- Lecture recordings made it easier to understand content
- Linking finite state machines to functional programming
- New ideas about logic and its relation to computing
- The content learnt.
- The course itself.
- The fact that it all comes together very nicely at the end of the course, and that everything is related
- The opportunity to explore the links between mathematical theory and computer science concepts.
- The review lectures were really helpful and well organised.
- The solutions for the tutorials
- The topics covered
- The tutorial questions with their solutions. MML textbook.
- The tutorial.
- The tutorials are really helpful like the worksheets
- The tutorials definitely were most valuable as i was able to interact with other students and overcomes issues I had been facing.

Tutorials
What did you find most valuable about the course? (continued)

- Understanding what goes on when trying to think of logical systems
- What I have learnt about logic
- When Prof Fourman would go through examples with pen and paper and explain his thought process.
- Topics such as resolution and entailment were interested topics that I never thought about and were interesting to learn.
What improvements, if any, would you make to the course?

- A little more time spent of FSM

- Be more clear when explaining stuff during the lectures. Many people were falling behind and couldn't understand what was going on in the course and ended up disliking it. I believe this course needs to be improved a lot. The things need to be improved is to make explanations clearer during the lectures and be more organized before the lectures in order for people to get most of it. The syllabus is very good so no changes needed there. The course is good, but also, it needs to be clearer how these things will be used, why in the future in order for the students to have an idea of why they are learning these things and why this course is valuable and worth to learn.

- Better explained lectures, more organised tutorials. Tutorials should expand on lecture work, but not to the extent CL does. We don't learn, we self-teach, and most people give up in that regard.

- Better explanation of the coursework in the lectures, they were very abstract and vague. Not explaining exactly how to answer the questions. I would have preferred example questions shown on the lecture slides. Also a longer period of time for the tutorial.

- Could really do with a course handbook similar to the Physics 1A course which contains the key info about the course and how each section relates to one another, so that students who learn best by reading can easily find the information required

- Course lacked structure: random topics were thrown into the tutorial exercise with no mention of them in the lecture which made all the tutorial exercises very difficult at the time, the tutors also seemed to lack understanding of it. Things like entailment were introduced like this and it just seemed to cause confusion, the best lectures were the revision lectures at the end where Prof. Fourman went through each concept slowly and in enough detail, I would recommend giving that same type of lecture earlier in the semester.

- Covering material more consistently on lectures - one of the most important concepts, entailment, appeared on multiple tutorials before being properly explained on a lecture

- Explain concepts and methods more clearly

- Explain more to the tutors before the tutorials. It feels like they should know the answers as well as the instructors, and them going through it beforehand would also help to catch possible confusions/errors/points where the explanations don't quite make sense.

- For more clearly explaining of some logics, also give some top-hat questions instead of just talk the ppt given.

- Have a place where there is all the important information, like other subjects there was no book to buy, or course handbook provided by the Uni, where there is everything you need. Instead the information is very disjointed, not all in one place, as the lectures didn’t make it clear what was going on, it can be annoying to try and find more on it and not quite find all that we need to know. And the lecture slides can be very unclear unless you go over the lecture and what he is saying as well as the slides, (which isn't always going to be there due to technical errors)

- Have the tutorial work and lectures be about the same thing.

- Explanation to accompany tutorial solutions

- I’d suggest an open lecture idea in which students write piece of code.

- I just found it a bit odd that we only studied entailment after FSMs and not after logic. Apart from that, I would have liked if some solutions to tutorial questions were more detailed as I not always understood an explanation given in the tutorials or maybe I was distracted when an explanation was given.

- I would have set tutorial groups so that you get to know people on the course and are get comfortable working with them as a team and it would also be good if each group had a constant assigned tutor. I would also publish some sort of set syllabus with at least brief notes as I often found the way the course was taught difficult to follow - I often didn't really know what I was meant to be learning.

- If it could make more sense.
What improvements, if any, would you make to the course? (continued)

- If the tutorial content was introduced in lectures before the tutorial it would prevent all the confusion and misunderstanding over the likes of entailment which was introduced in tutorials before it was actually explained.
- It is better to ask questions when finish teaching one topic.
- Lecturer should be "faster" and more organized.
- Link topics together more and explain terms used in the tutorial worksheet.
- Make it very clear in lectures or on the course webpage what is on the exam and what is not. It's good to learn for the sake of learning and not just for the exam, but for a student who's struggling, it would be helpful if he knew what was necessary to understand and what additional information was.
- Also, the slides used in lectures were quite cluttered. There was an overload of information just thrown on them. It would be easier to understand if there were titles/subtitles for different sections.
- Make the slides 'explain' more. Sometimes it just seems like an illogical, jumbled mess which cannot be understood.
- Make the slides more clearly.
- Make things more organised like swapping the sequences of FSM and entailment.
- Maybe having slightly clearer definitions in certain topics, as some do cause quite a bit of confusion.
- Maybe tutors in tutorials should have specified tables. Lectures rather rushed and reading is not clear which parts are actually needed to pass the exam. Just struggling to realise what i need to revise and what resources to use.
- More Dave Cochran. Smaller tutorial groups. I did not understand any of this course until Dave Cochran became involved in extra workshops.
- More explanation.
- More time spent on explaining and answering questions about the key concepts such as entailment and resolution.
- More tutor to student interaction in tutorials, in smaller groups.
- Better prepared explanations and solutions to tutorial work.
- Better structured lecture slides and the lecture notes used by the lecturer to be released on the course website.
- Clearer and better explained lectures.
- No errors on lecture slides, consistent times with lectures, more tutors present in tutorials, having a set of notes alongside slides which help explain the content. Lecturer actually being present for all lectures would also be useful or at least notify students of an absence BEFORE the lecture.
- None
- Please always mention what the current taught content is used for in real life. Sometimes this information gets lost and one doesn't understand why he is doing all the stuff in the course.
- Please find a new lecturer for the course. Michael Fourman is not a good teacher and seems to not really know what he's doing in general.
- Relate the lectures and their slides more directly with the tutorial questions as this was rare. Take fewer tangents during lectures. Write down logic in the lecture instead of talking about it! Less fragmented reading list, is it possible to condense this as there is not actually that much we must memorise? A tutorial format like FP would be more effective than one larger one which had a lack of structure and leadership. Use TopHat if it can be used as effectively as in ILA.
What improvements, if any, would you make to the course? (continued)

- Shorter, more concise tutorial activities with clear solutions published
- Some tutorials (the first ones especially) had very long exercises that were not very relevant to the course, like writing many numbers in 8 different bases or doing modular arithmetic. They should be shortened or omitted (or better, made optional, like the optional exercises in FP for people who want to go further in the topic)
- Somethings are not explained properly - entailment came out in tutorials and never explained in lecture until 5 or 6 weeks later
- The course is a very complex course so I don't know what could be changed to improve it
- The course is too theoretical. It is not usually clear why the material is worth studying or what applications they have, which might prevent students from developing an interest in the subject.
- The delivery of the course could be significantly improved. Overall, i don't think this is a very difficult course, but the explanations are too advanced for some to understand. Moreover, some topic in the tutorial/exam were expected from us to know without teaching these on lectures (it was around the end of the course) or it was explained after the tutorial on Pizza in a way that it was clear.
- The explanation in lecture sometimes confusing
- The tutorials are not very helpful as the tutors are not very interactive and the lecture slides are of not much use
- The tutorials could have been more useful if they'd be longer or if the new material covered was less.
- The way lectures were taught made the subject confusing since the examples were quite abstract. Even though it turned out that the examinable material was straightforward it would be better is the lectures focused on more practical examples which would be easier to follow.
- Turn it into something that actually seems of any use.
- Tutorial exercises being published earlier, and lecture notes would have been very useful.
  - Where I was be able to see the lectures of Prof Fourman’s lecture for the past year. I find that they are more approachable as those lectures are be written on board and on paper, in compare to the lectures that we received as power point presentation now a days in class.
  - clearer syllabus, state learning outcome for each lecture, cover material in lectures before setting tutorial work
  - it would be of great help if the lecturer introduced the concepts in the lecture first as opposed to giving it for tutorials as homework and expecting us to read and familiarise ourselves with it and then explaining it again in the lecture later. Also, we didn’t have a definite textbook to help us.
  - Also, since the lecturer assumed that because we had completed the worksheet for the tutorial, we knew the basics and started teaching at an intermediate level- never mind those students that didn't understand the tutorials!
  - more reading material
- no
- the lecturer should really work hard on improving the quality of lecture
Please add any other comments you have about workshops and tutors

- Answers to questions are explained in a far more complicated manner than necessary. This makes the reiteration of "keep it simple" highly ironic.
- Be more interactive
- Can tutors lead us to do the tutorial work? Cuz my table just correct the answer and feel nothing to do. I just finished a very small part of the tutorial work.
- Couldn't keep up with the pace as every week was a new concept that was first being introduced in the tutorial instead of the lecture.
- Found collaboration with people in the tutorials very helpful but the tutors gave little help and usually didn't seem to understand the work themselves.
- Have tutorials in smaller groups, the current tutorial format is of limited use because of the low tutor to student ratio
- I think small group is better
- I would have set tutorial groups so that you get to know people on the course and are get comfortable working with them as a team and it would also be good if each group had a constant assigned tutor.
- If the tutorial activities can be explained more clearly will be better.
- Making the tutorials more organisable, especially the tutorial activities.
- Maybe much smaller groups for tutorials
- Most tutors do not know what they're doing. Definitely test their knowledge before giving them the position
- None
- Nothing really, the solutions to tutorials can be difficult to understand as there is no explanations and only an answers. Also, some answers (some rare occasions) can be wrong in solutions which will confuse me as I'm already unsure and it can have me even more confused.
- Please assign a fixed tutor for each table in the tutorial.
- More time is needed for the tutorials!
- Sitting in a group of students and reading the solutions to tutorial work wasn't helpful. Being in a set group of 5-10 students with a tutor would be better.
- The timing of the workshops was often off - we wouldn't have time to attempt the tutorial exercises because so much time was spent checking the work we did at home.
- The tutorials could have been more useful if they'd be longer or if the new material covered was less.
- The tutorials seemed very disorganised and usually ended up being a case of trying to understand the often long winded and confusing solutions and explanations to the tutorial questions. Because of this it was rare that myself and others seemed to make it on to the intended work for the tutorial.
- The tutorials were not well organised, and they would have benefitted by staying like FP tutorials.
- The tutorials would be much better in smaller groups, I feel like the tutors in most situations could not help or were not available.
- The tutors couldn't explain anything.
- The workshops felt rushed sometimes and unorganized
Please add any other comments you have about workshops and tutors (continued)

- There should be more tutors and they should interact more.

- Another problem was the "explanations" by a tutor. A tutor told our tutor group that (s)he cannot explain the technique, which solves the question, but if we did not learn it during lectures then we will. (the particular question can be in the exam) Please note that, the tutors are capable and have a lot of knowledge, but there explanations are not always clear or they can't explain them self.

- They felt really lackluster and I think they would be way more useful if they were in the style of the functional programming tutorials.

- To be able to finish most of the question before the tutorial session. The crucial question that was left in the exercise are been clearly explained by the tutors. They are friendly and really helpful.

- Tutors did not necessarily know the course material. Tutorial groups were too large. Tutorials were not structured.

- Tutors were helpful, but there were few tutorials where we actually managed to do the tutorial activity. This is mainly because the time schedule designed for them is not realistic.

- We never had time to do many (if any!) questions on the actual tutorial activity each week, as we spent so long going over the homework questions.

- Workshop questions are useful but rarely applied in the tutorials. Not enough tutors to answer questions.

- Workshops are not very helpful because there are too many exercises, which we never finish.

- Workshops were not focused. Student demonstrators were not too helpful and had to ask the supertutor/professor for help a lot of the time.

- explain things clearer , using more organised slides, do some examples during lectures

- it would have been helpful if there were more tutors with the amount of students there were

- n/a