

Informatics Student Course Feedback 2020/21

<http://www.inf.ed.ac.uk/teaching/surveys/2020-21>

This report contains feedback from students about a course taught in the School of Informatics during the 2020/21 academic year, in response to the following questions:

- What advice would you give to a student taking this course in future?
- 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, tutorials or labs on this course
- Please add any other comments you have about the presentation of course materials online and their accessibility
- Reflecting on your experience of hybrid teaching and learning on this course, what has worked well for you?
- Is there anything else you'd like to tell us about your experience of hybrid teaching and learning on this course that would help us improve our approach?

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

1. Blockchains and Distributed Ledgers [INFR11144_20-21_SV1_SEM1_ONLINE_CACORE19] -

1.7) What did you find most valuable about the course?

- A new way of thinking about the way people interact- good lecturer and well presented
- Courseworks are very useful for learning the course material
- Getting experience with smart contracts and how to interact with them. The coursework tasks are essentially programming problems but with the added security/logic/other considerations required when working with blockchains, which I thought made them enjoyable to work on.
- I know quite more about bitcoin and related technics now.
- I learn a lot about this new area.
- I really enjoyed both the lectures and the assignments.
- I think the courseworks are really interesting.
- Interesting topic, insightful lectures, great interaction on coursework feedback
- Learn of blockchains
- Learning Solidity and self studying.
- Learning about how blockchains and crypto currencies function.
- Relates to current debates on cryptocurrency and security.
- Teaching has been excellent, a really conscientious lecturer who's excellent at explaining the subject
- The assignments are interesting and are excellent for learning both practical skills and the theory.
- The content was very well explained and very interesting.
- The coursework was very well made and interesting to take part in. Also I really like that the deadlines are spaced out.
- The courseworks
- The hands on experience with blockchain on the assignments
- The lectures were interesting.
- The lectures were organised, the material was useful and the assignments challenging and very interesting.
I appreciated that the lecturer often paused to make sure that the students were able to follow him (by asking us questions, urging us to ask our own questions, etc.)
- learning about different types of security flaws

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

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- Better feedback of assignments.
- Either cover all week content in the lectures or provide additional reading to cover the gaps;
Clearer coursework descriptions;
Much more detailed feedback;
- Finish the slides during the lecture if possible, if not have slides with more information so they can be read at home. Majority of slides are a lot of diagrams and pictures that without explanation can be meaningless. Some of these slides are not covered in lectures so the student has to figure out what is going on.
- For large portions of the assignments, the corresponding taught section was skipped in the lecture. For example, part 3 of assignment 3 seems to require information from the slides we didn't get to in Lecture 8. The entirety of assignment 4 involves information covered in slides that weren't discussed in lecture 9. This would be fine if the slides were sufficient for self-study, but they are not. We should cover the portions of the lecture that we are going to be evaluated on. Additionally, portions of assignments were ambiguous and confusing. This was brought up in a Piazza chat. Despite multiple students losing points due to a misunderstanding in the assignment, nothing was changed. Furthermore, when I asked a question on clarity about an assignment, the instructor responded by repeating the vague instructions. Difficulty through ambiguity is not a valid form of assessment.
- Give a little bit more motivation behind certain topics and try to connect topics together more thoroughly. The slides could also be improved because currently it is rather hard to follow them without watching the lecture. Alternatively, to keep concise slides, introduce some course notes.
- I think that having tutorials alongside the lectures (e.g. on Solidity programming) would be very beneficial for the students and would help them achieve a better understanding of the taught concepts and perform better in the assignments.
- I would like some tutorials or labs.
- I would recommend to provide better notes for the lecture or references to study in advance of each lecture to find it easier to understand.
- Maybe more difficult algorithms could be applied in this course.
- More examples of code
- More opportunities for practice? Coursework was good but only 2 of them happened during the semester, and didn't have a lot of prior basis. Some labs would have been interesting and useful.
- None.
- Providing some more further or optional reading would be helpful since I do not think all concepts are necessarily best explained using the lecture format
- Some assignment tasks were quite vague, it wasn't obvious what's expected from us. I also didn't like having to ask for Ether to be transferred over the weekend when the assignment is due Monday. Some more hand-holding would have been appreciated.
- Some more recent developments, like the Lightning Network, could be covered but overall the selection of topics is quite good. I would also stress more that blockchains are a means to an end, and more traditional cryptographic tools and databases can be used for some of the trendy use-cases.
- Some of the coursework specification was vague in places and then ended up losing marks due to the ambiguity, would be nicer to have a more structured marking scheme
- The lecturer needs to make his wordings much more clear, both in lectures and in coursework questions, as it creates a massive confusion every single time. Also would be great if he time his presentations better.
- The lectures only focus on the theory and the Macro applications, but the courseworks are about code. I can only learn how to do with the Solidity by myself. There is no adequate example or tutorial. And the course work instruction should be more clear. And I found that the CW instructions of IAML course are very good!
- The move to 100% coursework, although I haven't delved too deep into the last 2, feels like a lot of the content being taught after the first few weeks is not relevant for obtaining marks/being tested, as you cover all the smart contract content in the first few weeks which is what the courseworks depend on - maybe there are considerations for the last 2 courseworks that rely on the content in later weeks though, but didn't look that way on first glance.
- Would be great if the lecturer could organise some office hours.
- make the coursework specifications more detailed, one page is not enough information to base a whole assignment off of. Often had to search through piazza for answers that should have been in the cw doc.

2. Blockchains and Distributed Ledgers -

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

- Be prepared to have to search around the internet to teach yourself aspects that were not covered in the lectures, as there are no additional reading resources provided;
The coursework can be frustrating as you may lose marks for things that were not made clear in the coursework description;
- Cryptography background is beneficial, even if basic
- If you are interested in the subject and want to take an introductory level course for this domain, then take this course!
- Make sure to get practice with solidity and focus on making your coursework secure.
- Mildly challenging new technologies.
- Need to be disciplined to do readings on your own to understand better
- Plan your coursework implementations to the finest detail before implementing your smart contracts - it only takes one small mistake to entirely compromise the security of one, and you would have to explain your design choices in the coursework regardless. Think like an attacker to make sure you consider as many possible attacks as you can.
- Read more on other webpages would help
- Read the suggested papers, such as the Bitcoin or Ethereum Whitepaper.
- Research how to perform a gas evaluation.
- Start the courseworks early
- The course is focused on self-study.
- This is a really interesting course, definitely should take it. However, you must put a lot of effort and study in advance of each lecture.
- Unlike other courses, nothing has stood out to me as "unfair" or "useless" or "non-sensical" in this course. It's an interesting course that won't cause too much stress, I highly recommend it.
- Use online resources. Watch some youtube videos or read some articles when needed for the coursework
- You need make more efforts!
- a lot of external reading is required
- don't miss out. even the coursework was fun!

3. Blockchains and Distributed Ledgers -

3.1) Please add any other comments you have about the presentation of course materials online and their accessibility.

- Course materials have good accessibility, i would only recommend to add more information to the slides provided in order to make them useful to study.
- Course page is alright. Github distribution of materials works well.
- Felt like blackboard collaborate was more accessible than Zoom, but both were fine.
- For some topics there are existing videos publicly available online that explain concepts better than the lectures do. I also found annoying that there often wasn't enough time in the lecture recording to cover all the slides. So keeping the amount of content the same, but allocating a bit more time to lectures would be nice. No complaints otherwise.
- Having the materials in a git repository was convenient.
- I think the lecturer was good at paying attention to AV problems and switching technologies when necessary.
- It is good.
- Lectures were live and often encountered technical difficulties;
Frequently the lecturer would only get through half of the week's slides and then would tell the class to read the rest in their own time - the problem with that is that there is little detail in the slides themselves and they are reliant upon the lecturer explaining them;
- No on learn, put on learn
- None
- Very well done for an online course.
- Well organised, all easy to find

6. Blockchains and Distributed Ledgers -

6.1) Reflecting on your experience of hybrid teaching and learning on this course, what has worked well for you?

- All my learning has been fully virtual, from lectures, to labs, to group work. Informatics courses already seemed to be easily accessible remotely in the past, and the adjustments made have facilitated that even more.
- All online, still worked well and the lecturer did well to include students questions in the live lectures.
- Blackboard are too laggy for some students in some countries.
- By the way it wasn't hybrid, I had zero in person hours during the whole semester so please don't called it hybrid it is only online, keep it real don't lie.
- Course was not hybrid.
- Had no issues participating in this course completely remotely.
- I loved that the lectures were live. they helped in clarifying doubts as and when they came up. Also, it was easier than asking it in a lecture theatre.
- I really liked the live online lectures. The lecturers had some problems with his internet connection at times though, which was a shame.
- I think it is only online teaching and learning, but delivered well.
- Lectures being recorded has meant that I am able to focus on other courseworks that are due and catch-up without missing anything later
- Online learning should take into account student mental health and be more lenient
- Overall online worked well except for some technical issues during lectures.
- Recording every lecture has been really useful.
- The lecture is interesting because the lecturer allows us to engage and ask questions
- The lecturer has done a lot to address any issues with online lectures, for which I am grateful.
- The lectures were decently interactive and seemed to unaffected by the fact that they were virtual
- There was no in person experience? I did note that one long class worked much better than other courses that had lectures spread throughout the week. I'm not sure why.
- no hybrid, was all online

6.2) Is there anything else you'd like to tell us about your experience of hybrid teaching and learning on this course that would help us improve our approach?

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- By the way it wasn't hybrid, I had zero in person hours during the whole semester so please don't called it hybrid it is only online, keep it real don't lie.
- Encourage more participation in the lectures.
- Having Dr. Kohlweiss as backup lecturer is a joke, given the extremely low risk of the main lecturer becoming unavailable long term in the absence of in-person teaching.
- I wish Media Hopper wasn't being used to record the lectures. That relies on the lecturer's internet connection being stable, which it often wasn't, so the quality of lecture recordings was QUITE BAD at times. It would be much better to have the lectures recorded locally on the computer in high quality, and then uploaded to Learn afterwards to replace the live recording.
- In my view, this course was not an instance of hybrid learning since all activities were virtual.
The lectures had some technical problems, but they seemed to have been fixed after switching to Zoom instead of Blackboard.
- No. (2 Counts)
- None
- Piazza is not fully sufficient. There should be an opportunity (even if it's only fortnightly) for virtual office hours.
- Please keep the lectures live. Recording lectures is not the solution to everything. Also, lecturers tend to cross the time limit when the videos are recorded.
- Some prerecorded parts could be helpful as live lectures often have technical difficulties;
- There were some technical issues and participation from students was limited.
- We had lots of problems using blackboard collab, we moved to zoom and there's been no problems since
- no hybrid, was all online

9. Thank you -

9.1)

Thank you very much for taking the time to complete this questionnaire. Your response and comments will be fully considered.

Please provide any additional comments you may have about the course, the teaching on the course or the resources that support it in the box below.

- It's annoying to have half of the course materials on Learn, and the other half on an external web-site. Please, force course organizers to put everything in Learn.
- The content of the course is extremely good. I would only suggest to provide more material to study as most of what i learned came from Internet.
Lecturer (Aggelos) encourage participation every time which is good, but I would suggest to modify his slides with more useful information to study from them.
- The coursework specifications could have been more clear about what is expected.
- This course is fine. Not outstanding, but the assignments can be good fun and it covers some different content that can be refreshing.