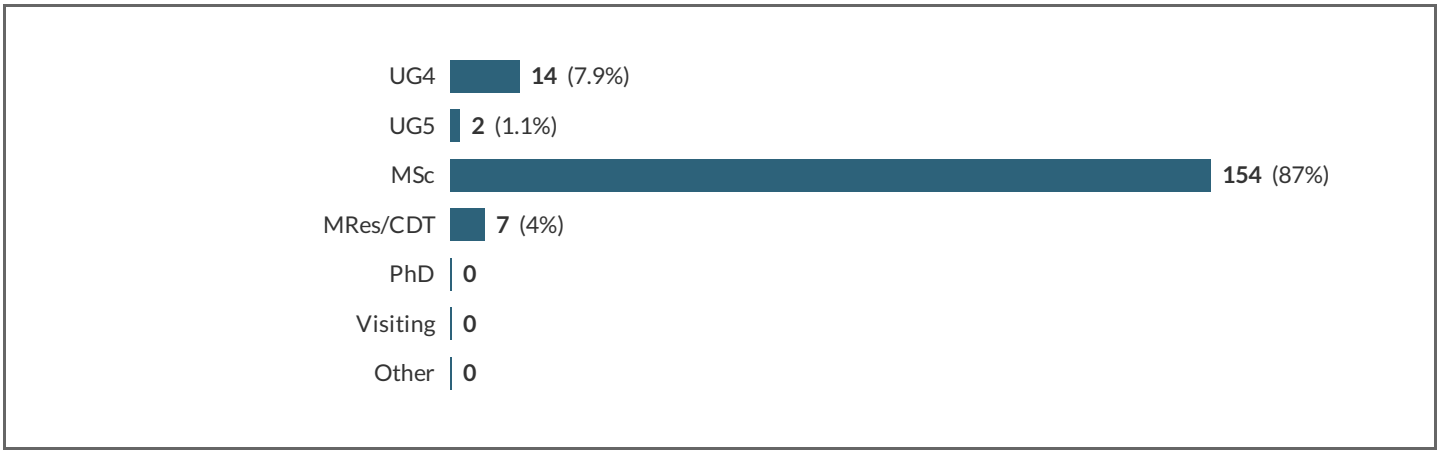
Machine Learning Practical 2018/19, Semester 1, Mid-semester survey

Showing 177 of 177 responses

Showing **all** responses
Hiding questions **5** & **6**
Response rate: 46%

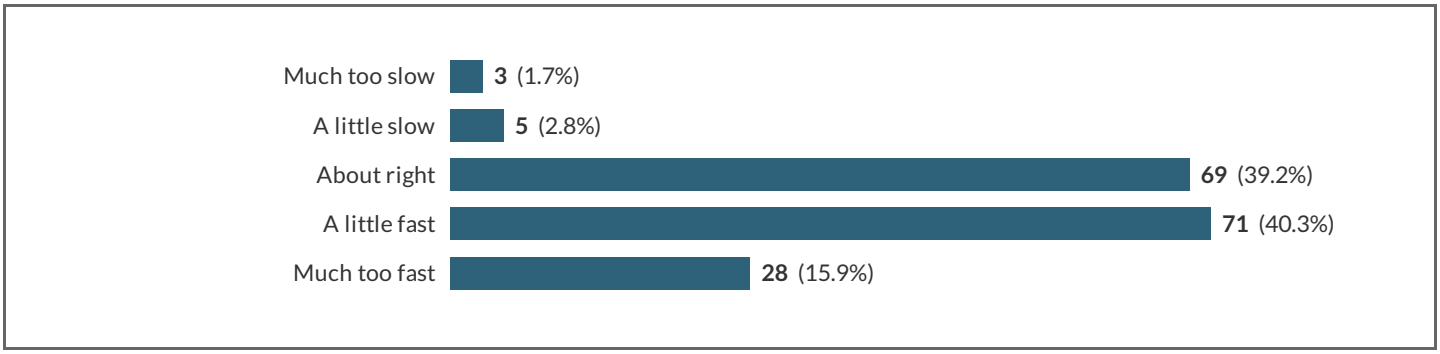
1 What type of student are you?



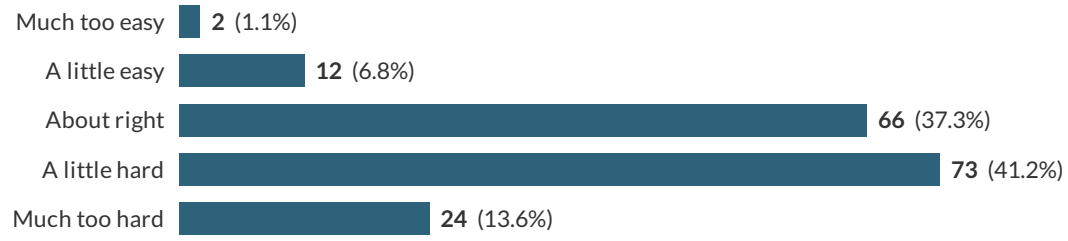
1.a If you selected Other, please specify:

No responses

2 How was the overall pace of the course in semester 1?

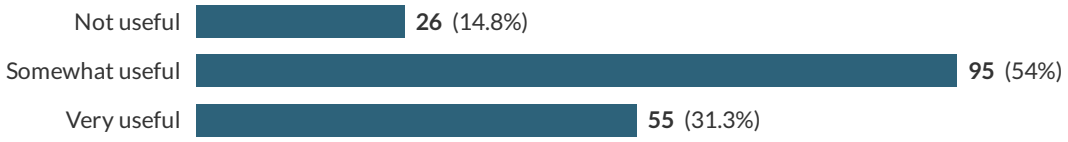


3 How did you find the overall content of the course in semester 1?



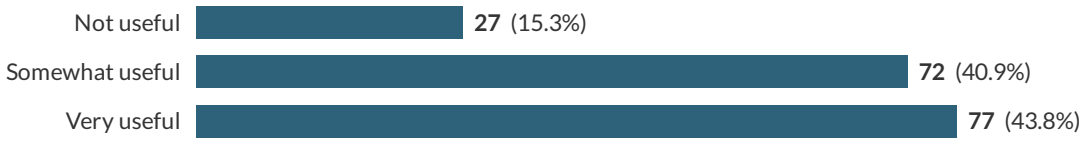
4 How useful were the following aspects of the MLP course?

4.1 Lectures



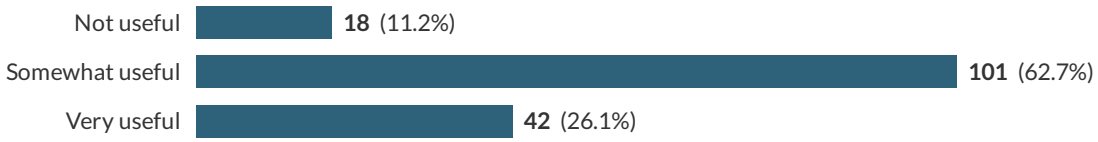
Multi answer: Percentage of respondents who selected each answer option (e.g. 100% would represent that all this question's respondents chose that option)

4.2 Lab sessions



Multi answer: Percentage of respondents who selected each answer option (e.g. 100% would represent that all this question's respondents chose that option)

4.3 ML-Base



Multi answer: Percentage of respondents who selected each answer option (e.g. 100% would represent that all this question's respondents chose that option)

4.4 Lecture slides on the web

Multi answer: Percentage of respondents who selected each answer option (e.g. 100% would represent that all this question's respondents chose that option)

4.5 Jupyter notebooks

Multi answer: Percentage of respondents who selected each answer option (e.g. 100% would represent that all this question's respondents chose that option)

4.6 Lecture recordings on the web

Multi answer: Percentage of respondents who selected each answer option (e.g. 100% would represent that all this question's respondents chose that option)

4.7 Recommended reading

Multi answer: Percentage of respondents who selected each answer option (e.g. 100% would represent that all this question's respondents chose that option)

4.8 Github

Multi answer: Percentage of respondents who selected each answer option (e.g. 100% would represent that all this question's respondents chose that option)

4.9 Piazza

Multi answer: Percentage of respondents who selected each answer option (e.g. 100% would represent that all this question's respondents chose that option)

7 Would you recommend taking this course to someone next year?

MLP MID-SEMESTER SURVEY, SEMESTER 1 2018-19
SUMMARY OF COMMENTS
6 November 2018

Course content
Most comments about the content were positive. The main negative comments were that the course is too hard or too fast and that the lectures are not high-level enough, with too much technical or mathematical content. There were a few comments asking for more introductory or tutorial material.

Labs
Most comments about the labs were positive. The main negative comments included the labs being too simple, with not enough support in the lab sessions.

Coursework
The main comment about the coursework is that too much was being asked in too short a time, resulting in people being overworked and feeling they could not do an adequate job. There were also positive comments about the coursework contents. There were a number of comments that the coursework was too difficult and the people did not feel adequately prepared for it. There was also concern about lack of compute resources.

Materials
There were a number of positive comments about the materials provided (Jupyter notebooks, lecture slides, lecture recordings). Some people found the slides and notebooks unclear, with not enough introductory material and not comprehensive enough.

Software
There were some positive comments about the MLP software, also some negative ones about it being inefficient, about the environment being laborious to setup and maintain, and about Jupiter Notebooks encouraging a poor coding style.

Here are some responses to specific points arising from the survey.

1/ **Coursework 1 was too much for the time allocated.**
This was, by far, the main concern raised in the survey

11 days was relatively short for this coursework, although I believe it was reasonable to do a good job in that time.

The main issue that, in hindsight, we should have emphasised better, is that we did not expect extensive grid searches for all the hyperparameters used in Adam and RMSProp. Default values, as recommended in the literature can be used - this was why we stated you needed to justify what you do *either* by reference to the literature *or* by experiment. You just needed to explore a (very) few values for learning rate and also the weight decay / L2 and cosine annealing. On Piazza people were writing about needing to do thousands of experiments for the coursework, whereas we were expecting maybe 30 or 40 - which would be a few hours running on a single desktop or laptop (and if you run a set of experiments, you can be doing something else while they are running).

The coursework was deliberately designed to be somewhat flexible, to enable people to start to think about designing their own experiments, and to enable people to bring in insights from the readings. The aim of this course is *not* to have people do completely specified tasks, but to learn how to address projects more broadly, which often involves defining and refining the objectives and design from an initial starting point.

The problem we had is that we did not want to release the coursework until the relevant material had been covered in lectures and labs, but equally wanted to leave time for a second coursework

Given all this, the most reasonable change for next year would be to release coursework 1 earlier. This would give students a week more on this coursework, but with the understanding that some of the material in the coursework may be covered in lectures to be delivered after the coursework is released (although the slides and recommended readings would be available earlier).

In addition we should make the point more strongly that labs 1-5 provide a lot of examples of the sort of thing that is required to carry out the coursework. Some of the comments we received about the coursework did not indicate that people had worked through and understood these labs.

2/ **Compute resources.**
We are addressing the issue of compute resources. For coursework 2 we provided Google Cloud credits for all students (and software support) to enable GPU-based experiments. In the second semester it will be possible to use the in-house cluster which contains 200 1060Ti GPUs (and which will be for the use of MLP students).

3/ **Software tools.**
It is a valuable skill to be able to use different software tools, and to learn how to be able to set up your own environment. That's why we use GitHub, Conda, Latex, etc. For GitHub and Conda we provided detailed material in the labs to enable you get setup. These materials are obviously focused on DICE/Linux but - if you follow the guidelines carefully - they should be easy to adapt to Windows and macOS. However, we only have the resources to support DICE. For LaTeX, which was recommended for the report, we did not provide a tutorial as such, but did provide a template document with examples of the aspects of LaTeX that would be required for your report. Being able to use LaTeX is a valuable skill in the area of machine learning and AI (you may notice that just about every paper you look at on arXiv is written using LaTeX).

4/ **Course too hard, too fast, requires too much prior information.**
This is a Level 11 course in machine learning. Hence, and as emphasised at the start of the course, it is not an introductory course, and students taking it are expected to have taken previous courses in machine learning and to have reasonable programming experience. The first lectures and labs should give a good idea of the what will be required in the course. Given this, it is not the role of this course to provide programming tutorials, mathematics tutorials (the maths required is calculus, linear algebra, and basic probability and statistics), or an introduction to basic concepts in machine learning.

5/ **Use of Jupyter Notebooks.**
The prime advantage of using Jupyter Notebooks is that they provide a very good learning environment, and a nice way to mix narrative, equations, and code. (In the 1980s this was called literate programming.) However it can encourage poor coding styles, encouraging people to write in small chunks of code - there was a very well-thought-out comment about this near the end of the comments on how to improve the course. It is indeed true that when setting up large experiments, it is often better to structure things into specific scripts, and store experimental data and results to files in a directory structure. We probably should emphasise more making the transition from Jupyter Notebooks to scripts stored in .py files.

Machine Learning Practical 2018/19, Semester 1, Mid-semester survey

Showing 177 of 177 responses

Showing **all** responses

Hiding **5** questions

Response rate: 46%

5 What do you like best about the course; what shouldn't change?

Showing all 88 responses	
The content.	404093-404084-40527216
The lab format is good :)	404093-404084-40529382
Content is great.	404093-404084-40532820
Excellent balance between theory and practical	404093-404084-40536036
The lectures could focus more on a high-level overview. We can always read the formal things ourselves. The mlp package is really nicely written! I'm learning a lot about python as well. It would be fantastic if we could spend some time in the lectures on what the thinking was that went into the design of that package. Maybe a cheat-sheet of good practices for ML code (or things we should avoid)	404093-404084-40537644
The labs are fine in my opinion.	404093-404084-40542590
The good set lab and coursework. So far so good.	404093-404084-40550229
Conveying the main idea of various algorithms. I learnt a lot.	404093-404084-40550069
I like the course contents	404093-404084-40550232
Lab exercises in jupyter notebooks	404093-404084-40550266
contents are fantastic	404093-404084-40550242
Fantastic documentation	404093-404084-40550197
The course worl and labs are very entertaining.	404093-404084-40550305
The "building from ground up" approach is great! The notebooks and framework code are also really useful to get in the right mindset to solve ml problems	404093-404084-40550227
Github example is good, just need some finetuning here and there. but overall all is good.	404093-404084-40550325
discussion on class	404093-404084-40550214

That we are doing practical things	404093-404084-40551045
I like the consistent and simple framework we're working with.	404093-404084-40550221
The jupyter notebooks are a very handy way to learn new concepts.	404093-404084-40554499
Style of lectures, presentation materials.	404093-404084-40554491
The assignment is useful and interesting in content. The helper Jupiter notebooks explaining how to get set up are useful. The lecture content is generally well-explained.	404093-404084-40554672
I liked the content of the lectures I like the practical work	404093-404084-40554829
lab	404093-404084-40554954
Use of Piazza, opportunities to communicate with people eg ML-Base etc. Don't feel alone in the course which is positive.	404093-404084-40555212
The pace of the labs is perfect to dive into the MLP framework	404093-404084-40555251
The content itself is so useful	404093-404084-40555345
The coursework 1 is quite good, but it would be much better if proper compute cluster would be available, as the scope of the coursework is open ended, and it is difficult to make choices regarding hyperparameter selection without prior experience in choosing them, which takes a lot of computation.	404093-404084-40555617
Labs are good	404093-404084-40556123
The deep, practical focus of the lectures.	404093-404084-40556609
The emphasis on practical algorithms, without delving too much in the theory (complementing MLPR really well!).	404093-404084-40556760
The jupyter notebook are very extensive, but super valuable. They help understand what deep learning is!	404093-404084-40557482
The course content is up to date and provides good hands on experience.	404093-404084-40550190
the labs and courseworks	404093-404084-40558652
The lectures are very good at building knowledge step by step, taking us from single layer networks upwards. This is a good system, and should be mirrored with the practicals.	404093-404084-40557049
We need more practical practice.	404093-404084-40562729
The lab helps me a lot.	404093-404084-40563713
ML-Base	404093-404084-40550207
I like that it's all focused on implementing things/practical, it's a good way of learning and increases confidence in actually knowing how to do things. I think the lab materials and tutors are really useful and helpful.	404093-404084-40567065
ML-Base lecture recordings lab sessions	404093-404084-40567429

Intorducing new algorithms	404093-404084-40581821
The lab exercises are well designed.	404093-404084-40576484
- Lecture recordings on the web are very helpful. - Comments in the code are generally very helpful. - In general, the coding is fun.	404093-404084-40586295
The course website and resource pages are excellent, especially the video recordings being broken down into section (although audio is often missing). Piazza is very responsive, and some interesting discussion happening there. The coursework was hard to understand at first, and it's very time consuming for the amount of credit, but it does push you to develop a lot of insight into the topic	404093-404084-40575823
Very practical approach. I like that we implement a deep learning framework "from scratch" it makes it easier to understand to architecture behind the more professional frameworks such as PyTorch.	404093-404084-40590528
Steve Renals is a very good lecturer, Jupyter notebook labs are very well explained in the notebooks	404093-404084-40610486
the content of this course is indeed useful to us. and the reading list can help a lot.	404093-404084-40612807
The theme of neural networks	404093-404084-40621050
The overall structure and lecture content is challenging, but I feel appropriately so for a level 11 course. The labs are very useful for implementing a practical application of the lecture content, which I find very useful for helping me cement and gain a deeper understanding of what I have learned.	404093-404084-40631319
Every lecture is along with a lab is really helpful.	404093-404084-40636923
The structure of the labs and how they build up to creating ML methods from scratch. The course content seems to be a good balance between the maths and programming aspects of neural networks, very much enjoyed it so far.	404093-404084-40642239
The mlp framework is written in a very good way to help students.	404093-404084-40648402
How the lectures tie in nicely with the weekly labs.	404093-404084-40649704
Lab sessions	404093-404084-40656231
What we're doing makes sense, it's real practical work, not just exercises for uni	404093-404084-40666291
Implement deep learning in the provided mlp framework.	404093-404084-40667251
jupyter notebooks are excellent. Outstandingly written.	404093-404084-40690993
coursework is the best. since it is very useful.	404093-404084-40693132
The course content is interesting and whatever is learned is then readily implimented in the labs, which clears up the concepts faster.	404093-404084-40694405
the lecture recording and lab	404093-404084-40694524

Learn by doing labs and coursework.	404093-404084-40694458
Lab sessions, they are the most useful so far	404093-404084-40694803
The amount of resources in the form of lecture notes and jupyter notebooks.	404093-404084-40694935
Content is good, interesting and challenging.	404093-404084-40694921
it is soooooooo hard, please be less challenging !!!!! please!!!!!	404093-404084-40695027
The lecturer format is good and the lectures themselves are engaging. The reading selections are also generally strong.	404093-404084-40694858
jupyter notebooks	404093-404084-40695231
For me, it is so difficult but i will try my best.	404093-404084-40696308
I like the slides on web because these help me a lot study myself.	404093-404084-40696891
The ML-base is really helpful! Some questions need to be answered face to face! The lecture recording is also great.	404093-404084-40696968
Give the introduction of the knowledge used for the lab in Jupyter notebook	404093-404084-40697043
I like the course, it contains a lot of usefull information about neural networks and how to work with them. I would like to see more information in the lectures about how to use our dice machine more efficiently.	404093-404084-40698083
Github	404093-404084-40698370
like lab the most	404093-404084-40698477
I like that we implement things from scratch but I think we could do it even more from scratch. Sometimes it feels like you can't get the overall picture when you only fill in 1 line of code in a big package. But the Jupiter notebooks are a wonderful way of having an interactive learning environment.	404093-404084-40699112
Code skeletons with the detailed description	404093-404084-40699470
the assignments are hard enough we learn but not impossible we get frustrated	404093-404084-40699498
The lab sessions of this course are really necessary, which help us understand the knowledge better.	404093-404084-40703196
I like the content of the course, and the contents of the coursework.	404093-404084-40705431
The course is very updated. The assignment 1 was about an optimized edition of Adam algorithm, published less than 1 year ago.	404093-404084-40713888
The lab is good for students to get familiar with the machine learning programming who have no prior experiences.	404093-404084-40721370
Really current topics, no old techniques from 20 years ago. The lectures are incredibly good and the lab exercises are really good.	404093-404084-40721807
The lab is well-designed.	404093-404084-40723436
Great jupiter notebook solutions	404093-404084-40723880

Great Jupiter notebook solutions. Writing a formal report as coursework.	404093-404084-40723880
The first lecturer was extremely clear and clearly enthusiastic. I liked the material and practical aspects. The focus on research was good. Practicals were helpful too.	404093-404084-40727572
Course content covers interesting material and practical skills.	404093-404084-40729964
The slides were very good start to understand some basic principles and the labs were designed well to practice them.	404093-404084-40731502
The course material and subject of neural networks is very interesting so they should not be changed.	404093-404084-40735425
so far the covered content was very interesting and seems to be useful. The interactive labs help a lot and having the separate course page, as opposed to moving it all to Learn, helps to find all the different materials, it's easily structured, especially the split video recordings.	404093-404084-40739655

6 Any comments on how to improve the course?

Showing all 96 responses	
More story and context to why we are doing things in class. The coursework is huge and even getting to a submission will be a challenge when balancing other courses. I really think you've over expected of me.	404093-404084-40527216
I'm finding the first coursework quite overwhelming, I think the instructions could be clearer as to what's expected of us given that a lot of experiments take a long time to run.	404093-404084-40529382
Make labs sessions longer or lab content less, nearly impossible to finish even 50% in given time.	404093-404084-40532820
Piazza is a bit clunky. Hypothesis, as used in MLPR, works better	404093-404084-40536036
Clearer guidelines of what is expected from us in the coursework. How many experiments are considered enough experiments for example. More guidance on how to find optimal hyperparameters (a grid search takes very long).	404093-404084-40542590
- time for the amount of work in CW1 should be increased, too much work for 10% since students also have other courses and cant work on one course for 1.5 weeks	404093-404084-40545661
So far so good	404093-404084-40550229
Too many readings.. Also it is a little fast-paced, and actually we need better computational resources.	404093-404084-40550069
Should provide a reading list or programming tutorials for students who didn’t have experiences	404093-404084-40550232
Less complicated programming	404093-404084-40550266
assignments are too hard	404093-404084-40550242
slide recordings should keep constant video signal. Currently there are	404093-404084-40550197

Slide recordings should keep constant video signal. Currently there are regular flashes of black on slide inputs.	404093-404084-40550197
The lecture is not that useful if you dont have s good understanding of the subject.	404093-404084-40550305
too difficult difficult assignment	404093-404084-40550250
I personally am finding the 1st coursework overwhelming. There are a number of reasons: - assigment released too close to deadline - volume of tasks is large and tasks take so much time to run. - some coding tasks are unclear making it difficult to understand what is needed and when a solution is correct. More tests and more granular tests would help here. - labs didnt sufficiently prepare us for what is expected.	404093-404084-40550260
I would put more emphasis on "when" different concepts are useful. Many approaches explained (initialization, schedulers etc.) focus on how to apply them, but rarely on when you should consider them (eg. Maybe i don't need a learning rate scheduler for smooth cost functions?)	404093-404084-40550227
More practical example.	404093-404084-40550325
more details like pics	404093-404084-40550214
Tutorial	404093-404084-40551045
The labs are a bit too simple, they don't require good understanding or more than minimum amount of time to implement everything correctly, and it causes a big jump moving on to the first assignment.	404093-404084-40550221
The first coursework could be given more weighting or be significantly simplified. It is very demanding for only 10% of the total mark.	404093-404084-40554499
Find a more concise way to help students using Windows to set up their environment. It is very annoying when you spent most of your time figuring out how to get the computer fixed for the course.	404093-404084-40554515
Assignment 1 has really impacted the flow of my studies. It was really difficult and I had to dedicate more time to it than any other course. I feel this was because the questions were not well explained and a lot was open ended without clear bounds. I think there is also risk that coding has mistakes and the whole effort is wasted. Lab work should have supported this, I can see what you are trying to do in terms of learning pace but in reality it didn't work and many people struggled to keep up the labs and the labs weren't enough to prepare us for credit bearing assignments. I think more group work is needed, facilitated by longer lab times and more tutoring. Either that or make sure someone is checking lab work and that people are reaching the right conclusions. This is an art form and it requires discussion to tune our thinking to be correct for solving assignments.	404093-404084-40554491
We have not been given adequate time for the assignment. We had the knowledge to get started more than a week ago. This is made much worse by the fact that the compute servers are FAR too slow to use in practice. Even by illicitly using a nice score of zero, training any kind of neural net remotely is unworkable slow. This means in practice all training must be done locally which is a serious disadvantage for anyone	404093-404084-40554672

with a slow processor.	
I would give more work on the labs and not do so much pre done work. I believe we don't learn so much because most of the work has been done already.	404093-404084-40554829
the coursework 1 is too hard	404093-404084-40554954
More guidance during the lab sessions, for example an explanation of what we are going to go through that week. Perhaps having a smaller group for people less confident who can go through it together. Coursework 1 very difficult and a lot of work for only 10% of the credits. Very worried about the next assignment worth 4 times as much.	404093-404084-40555212
There are a lot of interesting questions proposed in the labs that aren't given solutions or possible answers (in case there's no definitive answer) and would be amazing to include in the next week's lab.	404093-404084-40555251
Organized coursework would be a good idea.	404093-404084-40555345
Try to make labs more challenging and interesting, for example, if labs were a bit more like the coursework1 that would give much better intuition in the long run.	404093-404084-40555617
More lead time on coursework.	404093-404084-40555984
Lectures should focus more on intuition than math; easier to work through the math at our own pace	404093-404084-40556123
The coursework involves a lot of sitting waiting for your model to train... Would be nice if we did less parameter tweaking for diverse models, but instead do more coding to get more understanding of the subroutines.	404093-404084-40556609
Allow more time to do Coursework 1! Even if it means releasing it before the content for it has been covered, some students prefer to get started early (and don't mind learning the content themselves, if necessary). Some general guidelines on how to approach Coursework 1 would also be nice. Maybe even an optional lab on report writing?	404093-404084-40556760
The lecture theatre is not suited for such a class. Also, the temperature is always too high. Slides are overloaded.	404093-404084-40557482
If the labs could me more interactive, where demonstrator actially demonstrates the code once or goes through it with the lan attendees	404093-404084-40550190
The deadline for the first assignment is far too short to allow for the full degree of experimentation that the assignment requires. Furthermore if a student makes a mistake in the implementation and loses time in debugging their code, they will not have the time to run all of the experiments necessary and may fail the assignment through no fault of their own. Ten days is simply not enough to implement everything and allow for the inevitable mistakes that students not familiar with neural networks will make, and are faced with the choice of submitting a flawed and incomplete piece of work or a fixed but poorly implemented (say only fifteen epochs instead of one hundred) assignment instead.	404093-404084-40557049

This assignment is supposed to help us learn and check our understanding of implementing different learning methods and rates, but it will do neither because it is just a rush to getting some result out. The resultant work will not reflect on the ability of knowledge of the student, or the effectiveness of the course as a result. If this becomes a pattern with assignments, it will be hard to recommend the course because of what could not be learned due to the deadlines. Although the notebooks have us implement different sections of a Neural Network, it would be useful to have the students create them in full from scratch. This would give a far better understanding of how they work, are implemented, and thus gives the students a greater ability to modify and experiment with them in future. A lot of time is lost to many students in labs by having to reinstall and set up the environment over and over. Although solutions are generally found, the advice usually given is just to reinstall and hope for the best. While the environment is useful, this limits the extent of the usefulness of labs dramatically, and as a result key lessons that would be learned are not.	
Practical more.	404093-404084-40562729
Please a bit slow...	404093-404084-40563713
More computational resources, please.	404093-404084-40550207
Coursework 1 takes WAY too much time for the amount of marks (10%). It would have been nice if some things were provided in a clearer way in the coursework-- in what detail are we meant to optimise the parameters? A lot of time i spent on figuring out how to do simple stuff like resetting the weights, running on a test set, etc. And generally it would be good to let people get more warning about how long it takes for the experiments to run and how to use ssh/student.compute to be more efficient and not hog machines.	404093-404084-40567065
I hope we can work in pairs in the first semester and work by ourselves in the second semester. Cos it may be too hard for some beginners to finish the coursework alone. We really need some guidance about work because this course is the most practical one in Artificial Intelligence. We expect to have some chance to experience corporations’s practical project or have an opportunity to visit a famous company. We really hope to have some experiences to find a job after finish this course.	404093-404084-40567429
The first coursework is far too much work for only 10%. It says on the spec that this is done so that people can learn from their mistakes which would be OK if it didn't require so much time investment. It requires a lot of hyperparameter tuning and training on a large dataset but it's horribly unoptimised code and there are no computing resources available to speed up the process. I think this coursework could have instead been to implement the same algorithms but perform the tuning using implementations in tensorflow/pytorch. I realise that this is a practical course but in general I don't think I learn anything from changing hyperparameters myself as opposed to just looking at others' results	404093-404084-40574897

looking at others' results.	
The first assignment is unreasonably time consuming. I appreciate that the idea is to give the students an experience of what it is like to engage in ML research but with all the other obligations, it has been tough to find the time to run the 14hours of experiments required to complete the work to an adequate standard.	404093-404084-40578095
More TA helps on Lab	404093-404084-40581821
- In the code, arbitrary numpy / pandas magic should be signposted as such, as it takes a while to figure out what the hell is going on sometimes. - The labs / assignments could be made way more clear – a lot of time is spent on trying to understand what is being asked, rather than on implementation.	404093-404084-40586295
For a first coursework, the amount of legwork you have to conduct to find out information is significant in comparison to the labs; some more hints would be useful to get acclimatised. Labs aren't very well structured either: I didn't really get some stuff until I had to start the coursework - maybe more coding of the framework would be useful, although you run into the risk of making it too big and people not working on it. Lectures go quite fast and it's easy to get lost	404093-404084-40575823
So far coursework 1 seems like a lot of work. I have been working in a research lab during the summer so I have some familiarity with running machine learning experiments but the coursework is still taking a very long time for me. What is concerning to me though is that due to the time constraints I cannot implement many of the best practices I learned (e.g. properly logging my experiments, having config files) and I am just rushing to get things done. However, I like the general idea of the coursework and I think that an experience like this is very valuable but maybe it would be more appropiate to have only one coursework in semester 1 but spend a lot of timing teaching people about best practices in running experiments and analysing the results. In my view it is more important to learn a rigorous and generally applicable workflow than to learn how to run as many experiments as possible within a given time (I know that the coursework is not supposed to be that but it kind of evolves into this due to time constraints).	404093-404084-40590528
Please allow more time for next coursework. 10 days is not enough for carrying out a lot of experiments, analyze their results and writing a decent report. We have other courses to work on.	404093-404084-40591238
Too many searches on the assignment 1. Have no time to do it. Not enough time! no time! Too computational expensive. NO MONEY to run all these search!	404093-404084-40599067
Less intimidating lab demonstrators! After hearing the way they talk to some students (as if their questions are stupid) I have been too nervous to ask for help.	404093-404084-40610486
I can not give a suggestion. I think this course can help students improve themselves as well as give them litter pressure. It is nearly perfect	404093-404084-40612807
The assignment 1 is not adequately long!	404093-404084-40617100

We were given only 10 days to complete it. Taken into consideration other priorities, we have maximum a week for the assignment. I think I already spent about 50 hours on the assignment and I haven't even started the last question.	
The first coursework should worth more for the amount of work is worth. I've already spend 5 full days of work on it and I still haven't finished. Too much workload.	404093-404084-40621050
I felt like the design of coursework 1 did not fit the amount of time set to do the assignment (a bit under 2 weeks). I felt unhappy with the quality of my submission, however I felt like I would have needed maybe an extra week or so to improve my results (since training the neural networks was time consuming). I started the coursework as soon as it was available and feel like I managed my time well, but felt like the assignment could have benefited from a longer time frame.	404093-404084-40631319
1.Please set a special course to explain the code in the lab and give materials about how to structure many layers of coding document and how to design the parameter passing from one layer to another layer. The codes in lab are really cool, I want to use this code to improve programming skills and gain a deeper understanding of these cool codes and then can write them by myself. 2. Can the explaination of different algorithm more clearly because it is difficult to understand the mathematics behind this algorithm immediately.	404093-404084-40636923
The first coursework is worth 10% of the course grade but the amount of time you have to put in to meet the expected standard is well beyond this weighting. We are told on the coursework assignment sheet and on piazza that 10% isn't worth that much you shouldn't spend too long on it but the task at hand is such a massive time-sink when: students don't have access to large amounts of compute (dice student.compute was slower than my 5 year old laptop) and when you ask every small parameter choice in the assignment to be justified with relevant research papers or experimental results. This is infeasible in the amount of time given to us and should be worth more or the tasks should be made smaller to match it's weighting. The coursework was handed out 10 days before the deadline, if you expect a grid search or similar for every parameter choice then we need more time, similarly reading research papers for every parameter choice is incredibly time consuming. The coursework task overall was very good we learnt a lot about a research area and dived deep into implementation issues and gained a good understanding of the topic but the time given and the weighting assigned isn't consistent with what is expected from the students.	404093-404084-40642239
The lab should be more helpful for students. Instead of each tutor sitting around and waiting if someone has a problem, they should organise how we process the questions at the lab hour giving hints and ways to do each task.	404093-404084-40648402
Coursework - seemed to ask too much for the time available, meaning we couldn't do the work required to the best of our ability. Some parts of the instructions seemed vague/unclear (though it was good that clarification questions on Piazza were generally answered quickly)	404093-404084-40649704

clarification questions on Piazza were generally answered quickly). Slightly more thorough test code would have been appreciated - obviously not possible for a test to cover all possible things that could go wrong, but a few more test cases would have helped.	
There should be introduction to the Math and required knowledge of Machine Learning before starting the current content of the course	404093-404084-40656231
Allow more time for coursework 1	404093-404084-40666291
The time of assignment is too short The assignment takes too much time because of parameter tuning	404093-404084-40667251
it should be 2 lectures per week. Try to compress all the content in just one lecture is somewhat insane. It would have been interesting to make student work in pairs for the first 3 labs to get used to the programming , given that there are some student not so god at it and other really good at it.	404093-404084-40690993
The time for the coursework is too limited.	404093-404084-40693132
More examples instead of plain math on slides. Proper tests. Especially for the coursework, comprehensive tests to see if we're doing it correctly would help alot.	404093-404084-40693789
For the coursework, the use of latex as a mandatory part was very disconcerting. As an international student, I have never had experience using it before and with a very limited deadline for the coursework, I found that much of my time was utilized trying to understand latex instead of working on the assignment. Perhaps allow some leniency on the use of latex or even just warn the students (who are not familiar with latex) that this may take time to understand and thus they should plan ahead.	404093-404084-40694405
Coursework was too intense for 10 days. I skipped many of my other lectures to do the coursework. If the goal of the coursework was to assess how we set up experiments, it could have been done by using GPU based libraries - this would have been faster to run and allowed us to experiment with multiple variables in a shorter time. If the goal was to test our ability to implement from research paper, this aspect still could have been segregated from the experiments - i.e. implement using the code as is, but allow experiments to be run using GPU based libraries.	404093-404084-40694458
give the students more time to complete the assignments.	404093-404084-40694610
More time for coursepaper	404093-404084-40694744
Extend time for the first coursework or ensure that enough computational resources are available	404093-404084-40694803
A bit more structured course material or notes.	404093-404084-40694935
Not enough time given for coursework 1, especially as other coursework was due around the same time.	404093-404084-40694921
it is sooooooooo hard, please be less challenging !!!!! please!!!!!	404093-404084-40695027
The first coursework was extremely painful. Implementing the models took half an hour, then tuning their parameters took days. I understand that that is a legitimate representation of a real-world machine learning	404093-404084-40694858

that that is a legitimate representation of a real world machine learning task, but for the purposes of saving students time, it might have been nice to provide some ranges of hyperparameter values outside of the ones specified in papers.	
Give us more time to do our coursework.	404093-404084-40696308
The coursework is not that closed to labs, so as a student without programming background (cannot seek for help from labs, and the coursework asks us to do it independently, it is a bit hard to complete it well.	404093-404084-40696600
1. The lectures should be more precise and specific on examples, which can help me understand more easily. 2. The time for coursework should be longer because lots of students have to finish it without sleeping in a few days.	404093-404084-40696891
There really should be more tutors for ML-base, maybe even turn the lab session into drop-in session for questions!! Last time I waited for an hour to get to ask the only tutor in ML-base.	404093-404084-40696968
give more example and practice in the lab	404093-404084-40697043
it would be better if we can get 5-10 min video about what and how to do in the lab this week before we start, rather than reading long text in jupyter notebook.	404093-404084-40698761
We had faaaaaar too little time to do coursework 1. We effectively had 9 days to run so many experiments that each take a long time. Me and other CDT students who are all good at programming and machine learning stayed up all night long trying to finish it in time. If we had a total of 3 weeks or so to do it would have been fine. But as it is we were very stressed about it.	404093-404084-40699112
More time to complete the coursework	404093-404084-40699470
Some lectures until now have covered basic material, talking about something harder we don't know would be nice	404093-404084-40699498
be slower please	404093-404084-40701114
I don't get used to the lecture.	404093-404084-40702935
Maybe the professor could give us more notes about the knowledge of class.	404093-404084-40703196
The amount of work/size of the first coursework came as a big shock to everyone and therefore ended up being stressful and frantic. An introduction to some of the basic implementation of ML models in the labs would have been useful. Eg applying a model on the test data set and storing/plotting and comparing models. While this does appear in some labs, I am now covering that material after I have handed in the first CW, more of this from the get go would have helped with some of the more fiddly parts of the coursework and allowed me to concentrate a bit more on the actual analysis of results	404093-404084-40705431
The deadline for the assignment one was too early. I spent many many hours in the lab sitting in front of the screen in order to complete the assignment before the due (at least 10hours per day). Thus, two days after the deadline I get infected by pilonidal cyst which is very common if you spend much time sitting. I could recommend that the assignments	404093-404084-40713888

you spend much time sitting. I could recommend that the assignments should be published at least 2 weeks before the deadline. This assignment was a terrible experience.	
I recommend a MLP course which only run at the 2 semester. I really like this course, but I don't have the relative knowledge about the machine learning. I choose the IAML first, and realise that the MLP will run through the overall year, if I don't choose that course, I will loss the chance to learn that. It is really difficult and cost a lot of times to finish the course work due to the lack of knowledge.	404093-404084-40721370
Release coursework more in advance. Maybe make labs longer so people have more opportunities to work and ask? But that's partly covered by the ML base. Not much to add, really. The course is amazing so far, even though it is rather challenging.	404093-404084-40721807
The pace of some lectures are too fast.	404093-404084-40723436
More instructor's answers on Piazza. Marking scheme for coursework.	404093-404084-40723880
The first lecturer was really good though he often tried to cover too much material too quickly. The material was not hard but was hard to follow when it was presented so quickly and he would often run out of time. The second lecturer is not very clear. It's hard to follow his lectures as he doesn't follow a clear narrative. A lot of students seem to speak in the lectures and it's very hard to follow when that's the case. I really don't like the Jupyter notebooks as they don't really teach you how to code properly. I always converted them to normal code.	404093-404084-40727572
Using Jupiter notebooks encourages bad code, bad namespace management and unpredictable code block evaluation. It would be ok to help people test things in a notebook but it would be more valuable if people had to pass a test script (similar to Assignment 1) and learn how to write experiment scripts which save data / weights to disk. Jupyter could be used for plotting and analysis afterwards. I've had to help my friends a lot who are new to python because they don't understand how python works and then how it interacts with Jupiter, and then people are hesistant to break out of this framework to write real .py files for experiments. This slows them down and doesn't encourage learning how python operates outside of small code blocks with an invisible namespace in the background which can be dangerous to handle unless you know what you are doing, which many people do not.	404093-404084-40729964
I believe that while the quantity of the course material covered was fine, the way the lectures and labs are executed make it difficult for a student who had no prior knowledge on the subject to follow. Based on the structure of the course the student is expected to cover the curriculum on her/his own while the lectures are just a very brief summary of the handbook. The jupyter notebooks are very helpful because they allow the student to understand how the course material is applied but still, the student is expected to understand how the code was written and	404093-404084-40735425

how it works which I believe shouldn't be a part of the course as it is very time consuming and unnecessary. For example, regarding the first coursework, I personally spent more time trying to understand how the code was supposed to work than running experiments and learning about the course material. Despite that I understand that there was time to ask questions, which I did, and the piazza platform could be sometimes helpful to find answers to simple questions. Although, I believe that this time was insufficient based on the quantity and complexity of the curriculum and coursework. While I have no problem of studying the material from the handbook on my own, which I believe to be necessary because of course it cannot be covered in its entirety in the lectures, I would personally prefer more lecture hours or tutorials that would allow for the students to be taught the course content more extensively with more hands on examples. I believe these are vital to the understanding of the material. Finally, the labs should be more interactive in order to serve the purpose of trying to show the students how the code works in accordance with the lectures.	
Coursework 1 felt like it was released a bit late with a very short period of time to do it and it also happened to go out in the same week most other deadlines were due, which was very annoying to work with. If the purpose of the first coursework is to get a feel for the report writing, I don't see why it couldn't be released earlier. Even if the content would still cover some later lecture videos (like RMSProp and Adam), if linked with needed papers student could still get a head start and find out how long it actually does take to run the experiments and test everything out.	404093-404084-40739655