What do I need to do well in the INF1-CL exam?

Well, the first thing you need is ... a thorough understanding of the material covered by the course—but of course, you already knew that. This note assumes you've come to revision sessions, reviewed the tutorial sheets and past papers, asked questions on Piazza, all of that stuff.

Well, yeah. I knew that. What else?

OK, fair enough, there are a few things. First of all, you have to understand what I’m looking for when I mark an exam script. It’s not just things-that-are-correct. It’s not just the absence of things-that-are-wrong. I’m looking for the clear demonstration of understanding.

Isn't that done by just answering questions right?

Yes, but there are pieces of dubious “exam technique” that are sometimes used by students, which optimise for either presence-of-right-things or (XOR) absence-of-wrong-things, to cover up for absence of understanding.

Like?

Like vagueness. A vague answer avoids saying anything wrong by avoiding saying anything much at all. However, it doesn’t demonstrate understanding any more than a wrong answer, so it gets the same mark.

So, that uses absence-of-wrongness—what about presence-of-rightness? Surely that can’t be misused?
I’m afraid it can. One trick I’ve seen in a fair number of exam scripts is ‘scattershot answering’; where you write down every possible thing you can think of to say, in the hope that the right answer will be in there somewhere.

**But if the right answer is in there…?**

If you answer a yes/no question with “yes no”, each word marked with a line that might be an underline or might be a strikethrough, you *have* given the right answer, because one of your answers is right; but you haven’t demonstrated understanding, so it gets the same mark as a single wrong answer. Most scattershot answers aren’t quite as blatant as that, but it’s the same trick. It doesn’t work.

**But what if one answer is just rough work?**

This is why you’re supposed to cross out rough answers.

**OK, what else?**

Ambiguous answers. If there’s more than one interpretation of your answer, and only one of them is right, don’t expect to be given the benefit of the doubt. It’s your responsibility to ensure that there is no doubt.

For instance, if you draw an NFA with the start-state missing, or no accepting states, or lines instead of arrows, even if the rest of it looks right I have to make a load of assumptions to *interpret* it as right, and if I do that I’m giving you a mark for my understanding. I won’t do that.

**That all seems a little harsh. What if I just don’t understand?**

The passing grade is 40%. Make sure you understand enough to get that much. Answer those questions first. Actually, that’s some good general exam
advice; it’s OK to answer the questions out of order. Answer the questions you are most confident with first.

**You don’t mind marking out of order?**

Nope. It’s no trouble, and for this exam most of your answers should be written in the space provided on the question paper.

**Good to know. OK, but what should a student do if they don’t understand any of it. Isn’t there anything you can do?**

Yes. The resits. Make sure you understand the material by resit time. There really is no substitute for understanding. But don’t give up prematurely – If you have some understanding you should be able to get some marks, and that may be enough.

**But there’s so much to have to remember!**

That’s why it’s important to study for understanding rather than recollection. If you understand the material, remembering comes for free.

**OK, is there anything else I need to do?**

Show your working. Remember, I want you to pass. Giving good grades makes me happy. If you get an answer wrong, but your working is right and it was just a simple slip of the pen, I will be happy to give you partial credit. I’m actually quite generous like that. For this exam, most of your working should go in the script book, there’s not much room for working on the paper (but please use it when there is). Make sure you make it clear in your script book which working relates to which question.

Also, if you use the convention of omitting the black hole state from a DFA, make sure you say “Black hole state omitted by convention”; that way I know
it's omitted because you understand the convention and not because you don't understand DFAs.

**Is that everything?**

Not quite. There are a few other things that you should be aware of that probably shouldn't influence the marking, but probably do. If you do stuff on an exam that isn't wrong or vague or ambiguous or scattershot, but it is annoying, the marker should just ignore it and mark as normal. That's what I try to do, believe me! But markers are human and no human is completely free of bias. So it's probably still worth your while assuming that a happy marker is a generous marker.

**So, what makes you happy? Should I include some jokes? Poetry? Flattering remarks about your beard?**

Please, please, please don’t.

What you have to understand is, I'm going to have over 200 scripts to mark over the holiday, and I'm paid on the assumption that one script takes 20 minutes to mark. The thing that makes me happy is being closer to finished. The thing that makes me unhappy is when I have decipher an answer and it takes twice as long as it's supposed to. I'm not marking you on your handwriting, but I do need to be able to read your answers. I'm not marking you for the neatness of your FSM-drawings, but if you give yourself room to make them clear, then you make my life easier, and that makes me a happy marker.

**Any other advice?**

Don't pull an all-nighter before the exam. There is no eight hours of study that will help you on the exam more than eight hours of sleep will. Have a decent lunch, and use the toilets before you go into the exam hall.
Make sure you know where the exam venue is and how long it will take you to get there; check that the night before. (Don’t be like me when I was an undergrad, basically). Bring pencils, pens, and erasers.

**OK, thanks for that.**

No problem. Good luck with the exam!