# Review



Carlos Moreno cmoreno@uwaterloo.ca EIT-4103



(image courtesy of clipartguide.com)

https://ece.uwaterloo.ca/~cmoreno/ece250

These slides, the course material, and course web site are based on work by Douglas W. Harder

# Review

# Standard reminder to set phones to silent/vibrate mode, please!



# Review

- Plan for today:
  - Administrivia
    - Dates / times / locations
    - Conditions / rules for the exam
    - Resources
  - Tips for the exam
  - Material to be covered in the exam

Exam date and time:

Friday, April 13, 9:00AM to 11:30AM

DC-1351

- No materials allowed no books, no notes, no calculators, smartphones, computers, or any electronic devices of any kind.
- No questions whatsoever during the exam
  - You will be penalized with a 2 marks deduction off the exam's grade for any question asked.

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- And yes, you may you'd have to be escorted by one of the T.A.s
- In any case, the emphasis here is: no questions about the exam (if something is not clear, state your assumptions and answer according to those assumptions)

You will not be allowed to leave during the first
60 minutes or the last 30 minutes of the exam.

 Additional "standard practices" and "common sense" applies — not allowed to talk, not allowed to look in any direction other than your own exam, not allowed to continue writing after one of the proctors announces that the exam period is over, etc.

- Resources before the exam:
  - The TAs will have office hours to assist you and answer questions.
  - I will post the schedule (as soon as we decide it) and their offices on the course web site, on the main section, under the *Announcements* subsection.

- Resources before the exam:
  - I will also post my office hours, but as usual, if you e-mail me, we can arrange to meet at a time that may work better for you. (disclaimer: I may or may not be available on particular days or at a particular time)

- Resources before the exam:
  - I will post some practice questions (like an assignment, only it's not due), including the topics that were not covered in the assignments.
    - Notice that the final covers everything that we have covered in class.
    - No particular emphasis on the second half (that actually should work to your advantage, when you think about it)

- Additional tips:
  - Read all the questions first, and start by answering the ones that are (or at least look) easy for you!
  - If you get stuck with a question, move on to the other questions, and come back to that one after you've answered as many of the other "easier" questions as possible!

- As for justifying your answers I will be a little flexible on this aspect.
  - We'll probably go with something like justifying the answer will be worth 25% of the marks, or something like that.
    - With exceptions, of course for some of the questions, I might specifically ask you to "show your work", or "justify the steps", etc. (prototypical example of this situation: if I ask you to run the quick sort on a given set of values, obviously, giving the answer without showing any work or justifying can not be worth a single mark!)

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  - There will be, however, a sort of "double jeopardy" effect when answering without any justification; the following rule will apply:
    - If you write an answer without any justification, and the answer is not exactly identical to the correct answer, you get 0 marks — no matter how silly the mistake, or how obvious it may be that it was a silly mistake: if you answer without justifying, the grading will be done in a completely binary way; the correct answer will give you full marks, anything else would give you zero marks.

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  - Additionally, to try and encourage you to develop the habit of always justifying your answers, I could even arrange for some bonus marks for the justification (or showing a step-by-step procedure) in cases where it is in principle trivial to do the simple calculations in your mind.

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  - One aspect that I will be careful with: in each and every question, I will be explicit about what you're expected in terms of justification.
    - That is, every question will come with instructions such as: "justify your answer", or "explain the steps", or "show your work", or "you only need to show the output of the algorithm at each iteration, no need to explain why", or "you don't need to justify your answer", or "1 bonus mark for justifying your answer", etc.

- About what material to expect for the exam:
  - General rule: if it appears on the slides, you should not be surprised that it appears in any of the exams (midterm or final).
    - Even less surprising if it is one of the items in the introductory slide (the one with the outline of what's going to be covered in the lesson)

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  - As for proofs you should not be surprised to be asked to do a proof by induction (either algebraic or other sort of argument), or by reduction.

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- About what material to expect for the exam:
  - As for proofs you should not be surprised to be asked to do a proof by induction (either algebraic or other sort of argument), or by reduction.
  - Something similar to the example your TA did in the last tutorial with the circuit-sat reduction (from the computational to the decision version) should not be a surprise
    - Notice that this hardly qualifies as a proof it's more like a "show that" (which can be seen as a very informal version of a proof). It should be sufficient to explain the idea, and not necessarily state all the details in a mathematically formal way.

- Another general guideline:
  - If at some point during answering one question you feel like without a calculator you can not continue, then you definitely are doing something wrong!