

midterm 1

Exam Outline

February 14, 2016

Department of Computer Science
University of Illinois at Urbana-Champaign

- Exam window: Monday, February 22 – Friday, February 26
- Multiple choice, short answer, short code (possibly)

where is the computer-based testing facility?

The Computer-based Testing Facility (CBTF) is in the basement of the Digital Computer Laboratory (DCL) building in room L416.

When at DCL go down to the basement and locate the EWS labs, which looks like this:



where is the computer-based testing facility?

The Computer-based Testing Facility (CBTF) is in the basement of the Digital Computer Laboratory (DCL) building in room L416.

Then you need to find the actual CBTF room L416, which looks like this:



when should i arrive?

You should go to the CBTF exactly 10 minutes before the start of your exam and wait in the corridor outside the lab. Please do not go earlier due to fire hazard restrictions. If you arrive earlier, you can wait on the ground floor of DCL until 10 minutes before the exam.

If you arrive late, your reservation may be cancelled or you may not be allowed to take the exam.

what should i bring? what should i know?

You should bring a writing instrument and your icard. Please have your icard out when you enter the lab so we can scan it.

Use the restroom **before** the exam. No bathroom breaks will be allowed during the exam.

Please follow directions and use assigned seats.

Please be considerate of others and avoid distracting behavior. Please be quiet when entering or exiting the CBTF.

what shouldn't i bring?

Bags are not allowed in the CBTF room. Please leave backpacks at home. There are lockers in the basement of DCL, but they do cost money and aren't very big (large laptops might not fit).

No cell phones or smart devices of any kind are allowed. Having a phone, smartwatch, or similar device in the CBTF is an academic integrity infraction and will be prosecuted to the maximum extent under Article 1, Part 4 of the Student Code.

You are not allowed to bring any scratch paper from home. Scratch paper will be provided. Do not take your scratch paper out of the CBTF.

No food or drink is allowed in the CBTF (including water bottles, coffees, or any kind of beverage).

how can i know how much time is left on the exam?

On the desktop of the computer, there is a clock. Typically exams will end at 10 minutes before the next hour.

what should i do if i have dres accomodations?

DRES students must bring their Letter of Accommodation to the exam. When you check in (before the exam starts), you should show the letter to the proctor. DRES students must be signed up for an exam slot with enough extra time in following slots to allow accommodations (e.g., if you need 2X time, then don't sign up for the last slot of the day).

anything else i should know about the cbtf?

For security purposes, users of the CBTF are subject to automatic and manual monitoring, including but not limited to video recording, screen capture, keystroke logging, and network data capture.

Do not discuss details about the exam with other students until the course staff says you can. Doing so will be considered as facilitating the cheating of others

anything else i should know about the exam?

You will sign up for a time slot online. You must take the exam during your scheduled time. You should be able to reschedule your time slot (to another open slot in the exam window) anytime before your scheduled slot. If you miss your time slot, you cannot reschedule.

You must take your exam in the CBTF at your scheduled time. Because we allow a multiple day period for you to schedule your exam, no makeup or conflict exams will be given except in cases of severe emergencies.

We highly recommend not signing up for the last day during the exam period, particularly if you think you might get sick. If you schedule your exam for Wednesday, for instance, and you wake up not feeling all that well, you could reschedule your slot to a later day in the testing period (if there are open slots). If you signed up for a slot on Friday, you would need to take the exam on Friday.

exam studying

Content:

- Quizes
- Parts of the homework
- inclass flows
- slides

Big ideas (incomplete list)

- Types in Python
- List versus an array. Why is it faster?
- Floating point representation in IEEE-754 and smaller systems.
- Floating point ranges and general properties.
- Machine precision. Denormalized values.
- Rounding vs Truncation error
- Cancellation, underflow, overflow.
- Properties of random generators.
- The basics of Monte Carlo.
- The basics of a Taylor Series approximation.