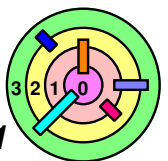


CS402 Exams

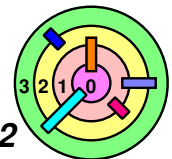
Bill Cheng

<http://merlot.usc.edu/william/usc/>



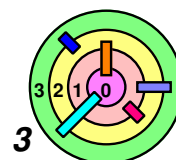
Purpose Of Exams

- ➡ Some people think that an exam is a learning experience
- not really
 - it's more like SAT, GRE, and TOFEL tests
 - it's an *assessment*
 - ◆ because I need to give you a *fair grade*
 - you are being tested for materials you have learned *in this class*
 - ◆ it's *not* about testing your general OS knowledge
 - ◆ you are tested on *knowledge (about CS 402) + "critical thinking"*



Midterm Exam Coverage

- ➡ Covers Ch 1 through Ch 4 that have been covered in lectures so far
- Ch 5 is **not** part of midterm coverage
 - also warmup1, warmup2, kernel1 (specs, FAQs, my post to class Google Group)
 - will **not** ask you to write warmup or kernel code, but can ask you about code in specs and FAQs
 - will **not** ask you to write assembly code, but can ask you about assembly code on lecture slides that have been explained

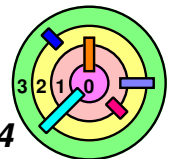


Question Types

➡ **Calculation-type** questions

➡ **Short answers**

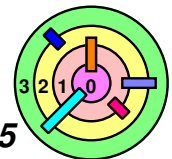
- ➡ give the **best answer** for a question
- ➡ if the question says, "In **N** words or less, ...", it's just a hint to tell you approximately how many words we expect
 - you can write more words
 - **exception**: when it's a fill-in-the-blank question (**N** would be small), then you **must not** use more than **N** words
- ➡ you get credit for including the right answer
- ➡ you get **deduction** for saying something wrong
 - cannot go below zero point
- ➡ must **not** answer a **general (high-level)** question by giving an example
- ➡ must **not** answer a **specific** question by giving a general (high-level) answer



Question Types

➡ *Multiple-choice*

- ➡ unless *explicitly* stated, every multiple-choice question has *one or more* correct answers
 - even if the question asks, "which *statements* are correct" or "under what *condition*", it *can* have one or more right answer/s
 - ◆ please ignore minor grammatical and spelling mistakes
 - if you select all the correct choices, you get 2 points
 - ◆ if only one correct answer, it's worth 2 points
 - ◆ if two correct answers, each is worth 1 point
 - ◆ if three correct answers, first one is worth 1 point, the rest worth 0.5 point each
 - ◆ if four correct answers, each is worth 0.5 point
 - for every *wrong* answer you have selected, you *lose 1 point*
 - ◆ best not to guess!

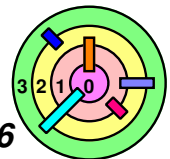


Question Types

➡ *Multiple-choice*

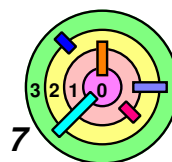
- ➡ if a statement is *inconsistent* or *incorrect*, it must be considered to be a "*false*" statement
 - if the question asked you to select all the correct statements, you must not select it
 - if the question asked you to select all the incorrect statements, you must select it

➡ Total points for a problem of any type cannot go negative



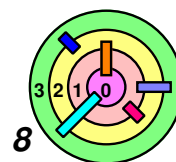
Question Types

- ➡ **Correct/best answers** to most questions in the exam are the ones **on lecture slides** (and in textbook)
- ➡ **lecture slides take precedence** since I cannot change textbook
 - ➡ please understand that exams are about materials in **this class**
 - it doesn't matter what you have read anywhere else
 - ➡ if you disagree with what's on a lecture slide, textbook, or my posts to the class Google Group, you need to complain to me **now** to set things straight
 - once the exam starts, it's too late to say that you don't like the answers on the lecture slides, textbook, or my posts
 - ➡ I reserve the right to ask about things that I think you should know and **not** on lecture slides or in textbook
 - ➡ therefore, you should focus on **studying lecture slides**
 - although it should be clear that for multiple-choice questions, the "wrong answers" are not on lecture slides
 - ◆ you need to figure out why some answers are wrong
 - you need to **understand** lecture slides (and textbook)



Critical Thinking

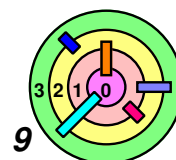
- ➡ Read questions and answers carefully and ***critically***
 - for every wrong answer in a multiple choice question, you should be able to ***pin-point*** exactly why the choice is wrong
 - based on your ***knowledge of the course material***
 - you should be able to form a ***clear argument*** why the answer is incorrect
- ➡ How to practice critical thinking
 - form a small study group (maybe with your kernel teammates as a start, or post to class Google Group to invite others)
 - study lecture slides and come up with questions based on the slides
 - short answers
 - true/false questions
 - ◆ if you answer "false", you must give a precise reason why you think the answer is false
 - ◆ this way, you develop the ***habit of being precise***



Midterm Exam Logistics

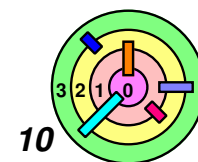
- ➡ Each section will get a different exam
 - ***DEN section:*** 10:00am - 10:40am, Wed, 3/24/2021
 - ***Asia time zone:*** 7pm - 7:40pm, Wed, 3/24/2021
 - ***AM section:*** 10:00am - 10:40am, Thu, 3/25/2021

- ➡ I am required by the university to ***offer*** an alternate exam for students ***participating from a time zone*** whose exam time is outside the "learning hours" (7am - 10pm USC time)
 - how do I guarantee fairness given that the exams are different?
 - absolutely no way (I have no proof that it can be 100% fair)!
 - there is only one class curve and one fixed scale (i.e., I will not use two curves to assign grades because that's also unfair)



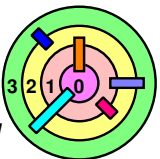
Midterm Exam Logistics

- ➡ Solution to the fairness problem:
 - for students *participating from a time zone in Asia*, you get to choose which exam to take
- ➡ If you are mostly concerned about getting a fair exam, you should take the DEN or AM exam (the one you are registered in)
 - although this maybe unfair to you since you may have to take the exam in the middle of the night
 - it's *manageable* since you have plenty of time to plan and get ready for the exam
- ➡ If you choose to take the *alternate exam*, you are implicitly *agreeing* to *trust me* to be fair to convert your exam grade to a grade that's compatible with the exams your classmates took
- ➡ If you are *participating from a time zone in Asia*, please reply to my e-mail to let me know your decision



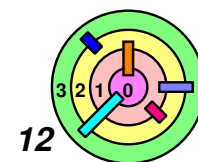
Midterm Exam Logistics

- ➡ Technically speaking, the midterm is a **take-home exam** and not an "online exam"
 - exams are open book, open notes (not open friend, of course)
 - you are required to sign a **pledge** to say that **you will not cheat**
 - no signed pledge, no exam!
- ➡ You can opt-out of the midterm exam and have your final exam account for 60% of your overall grade
 - must let me know via e-mail ahead of time
- ➡ If you are registered with the Disability Services and Programs (DSP) and require specific accommodations, please make sure that I have your paperwork



Midterm Exam Logistics

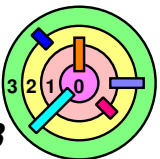
- ➡ Let's say that your exam is from 10:00am to 10:40am (if your exam is at a different time, please adjust accordingly)
- you are required to **stop working on exam at 10:40:00am** and **finish submitting the exam before 10:43:00am**
 - if your submission timestamp is exactly 10:43:00am, it will be considered as a **late submission**
 - **starting at 10:43:00am**, you will **lose 5%** for **each late minute**
 - what if you lost Internet connection when you submit?
 - I need **proof** that you really have an Internet problem
 - ◆ you must use the **Panopto Recorder** (or something that can create an MP4 video offline) to record submission activity **starting at 10:40:00am** and keep your recording as proof that you had Internet problem
 - ◆ you must follow all the instructions
 - if you don't have Internet problem, you must submit using a web form (just like submitting assignments)
 - if you **e-mail** your exam, it will be **at your own risk**



Midterm Exam Logistics

➡ Let's say that your exam is from 10:00am to 10:40am (cont...)

- 1) setup e-mail filter to never miss an e-mail from
<bill.cheng@usc.edu> (and never send it to spam)
- 2) by 9:55am, get your desktop ready
 - ⇒ display a clock on your desk that show your local time
 - ⇒ *start Panopto Recorder on your desktop* (don't start recording yet, just get it ready in case you need it later)
 - ⇒ get your submission PIN ready (same PIN as submitting assignments)
 - ⇒ set an alarm clock to go off at 10:39:00am and make sure your clock is correct

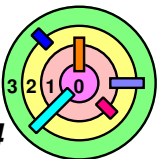


Midterm Exam Logistics

➡ Let's say that your exam is from 10:00am to 10:40am (cont...)

3) watch your inbox

- you will get an e-mail before 10:00:00am
- two links in the e-mail
 - first link to download a ZIP file that contains exam questions (PDF file) and answers (text file)
 - ◆ download it, unpack it, save answers text file on your *desktop* for easy access
 - 2nd link is for submitting your midterm (same web submission form as submitting assignments)
 - ◆ click on it, check time on submission server and make sure time on your desktop is correct
- you can work on your exam as soon as you get the e-mail
- if you have not received my e-mail by 10:00:00am, send e-mail to me immediately
 - e-mail can take a long time to get delivered
 - if you get a reply from me, please read my e-mail



Midterm Exam Logistics

➡ Let's say that your exam is from 10:00am to 10:40am (cont...)

4) when you have finished your first pass through the exam, make a submission (it should only take a few seconds)

➡ if you see a submission *ticket*, verify that the *file name* and *file size* look right

○ save web page as PDF

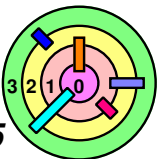
➡ feel free to make additional submission if you changed your answers text file

5) when your alarm goes off at 10:39:00am, you need to wrap things up and get ready to submit your answers text file

6) at 10:40:00am, you must stop working on your answers

➡ if your answers text file is the same as your more recent submission, then you are done

➡ otherwise, proceed to step (7)

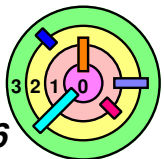


Midterm Exam Logistics

➡ Let's say that your exam is from 10:00am to 10:40am (cont...)

7) reload the submission web page

- ➡ if **successful** (i.e., you have Internet connectivity), make sure the time on the server matches your desktop clock
 - make a submission
 - if you get a server error, just **keep trying**
 - ◆ server is busy because too many students are submitting at the same time
 - ◆ you have 3 minutes, sooner or later, your submission will go through
 - ◆ this is why **you must start submitting at 10:40:00am**
 - if you see a submission **ticket**, verify that the **file name** and **file size** look right and notice the **server timestamp**
 - ◆ save web page as PDF, this is your proof that your submission has made it to my server
 - ◆ one proof is enough and you do not need to see the ticket e-mail

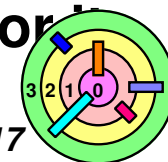


Midterm Exam Logistics

➡ Let's say that your exam is from 10:00am to 10:40am (cont...)

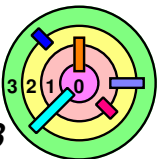
7) reload the submission web page (cont...)

- ➡ if **unsuccessful** (i.e., you have **no Internet** connectivity), start Panopto to record of your desktop as proof that you don't have Internet connectivity at 10:40:00am
 - **open answers text file** and **record its entire content** in a Panopto video **one page at a time** and take **photos** with your cellphones
 - ◆ reload the browser to prove that you don't have Internet connectivity
 - ◆ make sure your desktop **clock** is being recorded
 - **stop recording**, don't delete Panopto video and photos
 - ◆ **send me an e-mail** from your cellphone immediately, **attach photos** and let me know that **you have Internet problem at 10:40:00am** AND **you have a video proof**
 - ◆ do **not** send me the Panopto video unless I ask for it



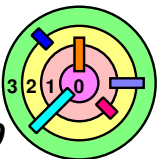
Midterm Exam Logistics

- ➡ Let's say that your exam is from 10:00am to 10:40am (cont...)
- 7) reload the submission web page (cont...)
- ➡ if **unsuccessful** (cont...)
 - when you get your Internet back, submit your answers text file using the submission web form
 - ◆ save ticket web page as PDF and send me e-mail to let me know that you have got your Internet back
 - ◆ your answers text file should be identical to the one in the video and in the photos
- ➡ You can substitute the Panopto Video Recorder with another video recorder that can record a MP4 video



Midterm Exam Rehearsal

- ➡ We will have a *rehearsal* on Monday, 3/22/2021 at 1:00pm
 - although not required, *you should participate*
 - **IMPORTANT:** download Panopto Video Recorder from D2L website and get it configured properly according to instructions
 - if you have an alternate MP4 recorder, get it set up
 - this way, you get to practice all the steps so you know what to expect
 - you can practice as many time as you would like and you should try out different scenarios
 - if you are not available during that time, you can still try the procedure any time afterwards
- ➡ For the real exam, you cannot say that you submit late because you are not familiar with some of the steps



Sample Old Exams

➡ I do not give out sample old exams

— sample multiple-choice question:

Which of the following is correct/incorrect about X?

— calculation-type questions

○ follow the calculations performed on lecture slides with different parameters

○ you should study all equations/calculations on lecture slides

— sample "short answer" question:

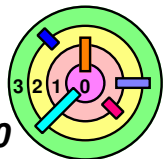
Q: What are the 3 types of questions in our exams?

A: multiple-choice, calculation, short answer

— most questions on the exam are **multiple-choice questions**

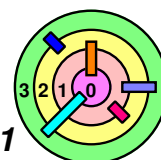
➡ Best way to study

— probably form a small study group and ask each other questions from lecture slides



General Rules

- ➡ Read problem descriptions (especially multiple choice answers) *very carefully*
 - you may *not* receive *any credit* if you *answer the wrong question*
 - if a question has multiple parts, make sure you answer every part and clearly label which answer is for which part
- ➡ We will give partial credit if applicable
 - no guarantee that you will get partial credit
- ➡ Do not just draw pictures to answer questions (unless the question asked you to draw pictures)
 - pictures will not be considered for grading unless they are clearly explained with words
- ➡ `weenix` questions
 - if a question does *not* mention the word "`weenix`" *explicitly*, you must *not* give a `weenix`-specific answer



General Rules

- ➡ Please *ignore minor spelling and grammatical mistakes*
 - they do *not* make an answer invalid or incorrect
- ➡ During the exam, you can e-mail me questions to *clarify* problems
 - please understand that e-mail may take days to get delivered
 - please don't count on me to reply immediately
 - I will *only* reply by posting to class Google Group
 - ◆ you should have your e-mail opened during the exam
 - please do not ask for hints or ask if "it's okay to answer this way"
 - if you ask a *non-clarification* type question, I will *not be responsible* for the answer that you think I gave
 - I will *not* answer questions regarding *multiple choice questions*
 - because it gives answers away
 - read the question carefully and choose carefully
 - ◆ need to select all the right answers and not select any of the wrong answers
 - most likely, I will *not* answer any questions during the exam (unless I have made a major mistake)

