

The background is a vibrant blue with stylized white and yellow gears. A large magnifying glass with a yellow handle is positioned on the right, focusing on a dark blue bug with yellow and black stripes. The text is overlaid on a dark blue rectangular area on the left.

CISC/CMPE 327 Software Quality Assurance

Queen's University, 2019–fall

Lecture #30 Review

Reminder

- If you wrote the first three, and you're satisfied with your average, you don't have to show up
- Well, I still encourage you to do it

Likely topics on mini-exam #4

- From Lecture 19 (Inspection & Refactoring)
 - (XP code inspection, refactoring)
 - Know some examples of “code smells” and refactorings, especially “Don’t Repeat Yourself” and how to “factor out” duplicate code into a new method

Likely topics on mini-exam #4

- From Lecture 24-26 (formal inspections)
 - Know (roughly) the relative costs from “Cost of Fixing Errors” (the histogram!!!)
 - Know the roles of Moderator, Inspectors, Author:
 - I could ask you to match them up with “keeps paraphrasing at a reasonable pace”, “paraphrase the code”, “clarifies code when asked”, etc.
 - I could describe a flawed Bogosys inspection process and ask you what’s wrong with it

Likely topics on mini-exam #4

- From Lecture 24-26 (formal inspections)
 - Know (roughly) the defect classification (critical, Severe, Moderate, Minor)
 - Example items on code checklist

Likely topics on mini-exam #4

- From Lecture 27
 - Basics of measurement

Likely topics on mini-exam #4

- From Lecture 28
 - difference between faults and failures
 - defect density
 - number of defects found, not the “real” number of defects (which is beyond our mortal knowledge)
 - relationship between faults and failures
 - software size: what’s wrong with using (S)LOC?

Likely topics on mini-exam #4

- From Lecture 29
 - COCOMO = Constructive Cost Model
 - $\text{Effort} = a (\text{Size})^b$
 - Almost meaningless if Size is in LOC
 - Different measure of size: function points
 - you don't need to memorize specific elements ("logical master files", etc.) or the coefficients on slide 19, but you should understand the basic idea and why function points are a better measure than LOC