**CS 4321 - Video Lecture Expectations**

Watch clips 1-16 only. You may omit clips 17-21.

**Video P4L3: White Box Testing (33 minutes)**

1. White box testing is also called…

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1. How is statement coverage measured?

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1. In industry, the typical statement coverage target is…

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1. Why don’t we shoot for 100% statement coverage (answer is later in the video)?

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1. In clip 8, the author illustrates that 100% coverage may still lead to bugs that are present. Describe in words the example?

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1. A control flow graph is a representation of the code that allows reason about the code. It uses nodes to represent \_\_\_\_ and edges to represent \_\_\_

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1. In branch coverage, a branch is any node with …

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1. How is branch coverage measured?

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1. With either branch or statement coverage, 100% coverage does not guarantee that bugs will be found? True or False.
2. Why does branch coverage subsume statement coverage?

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1. Condition coverage is different than branch coverage because instead of treating predicates as a whole, it does what?

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1. Condition coverage is not stronger than branch coverage? True or False
2. Explain what branch & condition coverage is and why it is stronger than branch coverage and condition coverage individually.

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1. The FAA requires that all software that runs on commercial aircraft to be tested under what coverage technique?

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1. Using MC/DC, how do we select test cases?

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