In-class Exercises
Criteria & Subsumption

Software Testing & Maintenance
SWE 437
http://go.gmu.edu/swe437

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(Dr. B for short)
In-class Exercise #1: Test Criteria

Today we discussed criteria-based test design.

In your group, **discuss and document** the following:

* What four structures do we use for test criteria?*
* What usually prevents our tests from achieving 100% coverage?*

A few software organizations use test criteria and report great success. However, **most organizations do not currently use test criteria**.

Based on your knowledge and experience, **why do you think test criteria are not used more?**
In-class Exercise #2: Subsumption

Suppose that coverage criterion C1 subsumes coverage criterion C2.

Further suppose that test set T1 satisfies C1 on program P and test set T2 satisfies C2, also on P.

Does T1 necessarily satisfy C2? Explain.
Does T2 necessarily satisfy C1? Explain.
If P contains a fault, and T2 reveals the fault, T1 does not necessarily also reveal the fault. Explain.