

## CSSE 376 – Software Quality Assurance

### Learning Outcomes

1. Create a test plan for a software system.
2. Explain the differences between testing strategies (ie unit vs integration, white vs black box, etc).
3. Apply boundary value analysis to create a unit test plan.
4. Apply test adequacy measures (e.g. code coverage and mutation testing) to identify deficiencies in a project's testing.
5. Apply mocking to convert integration tests into unit tests.
6. Apply principles and strategies of integration and regression testing.
7. Explain purposes of metrics, quality processes, methods for measuring that quality, and standards used.
8. Conduct code reviews and formal code inspections.
9. Explain the software design choices that must be made when developing software for international audiences.
10. Apply principles of test driven development to successfully develop a software product.