

Master Syllabus

BIS 1500 - Software Testing Fundamentals

Division: Business and Public Services

Department: Business Information Systems

Credit Hour Total: 3.0

Lecture Hrs: 3.0

Date Revised: December 2015

Course Description:

In this course, students will be introduced to the field of software testing at the fundamental level. Software testing theory and terminology for this course are primarily based on the International Software Testing Qualifications Board (ISTQB) foundation level certification requirements. Students will learn about the practical application of software testing throughout the software development life cycle. Hands-on exercises will provide students with practical skills in executing test cases, documenting results and participating in peer reviews. Successful completion of this course will entitle students to sit for the ISTQB Foundation Level certification exam.

General Education Outcomes:

- Written Communication Competency
- Critical Thinking/Problem Solving Competency
- Computer Literacy Competency
- Values/Citizenship/Community Competency

Course Outcomes:

Software Test Cases

Demonstrate the ability to execute, document and review software test cases.

Assessment Method: Locally developed exams

Performance Criteria:

Score of 80% or higher.

Assessment Method: Performance appraisals

Performance Criteria:

Score of 80% or higher.

Concepts and Terminology

Document the foundational concepts and terminology of software testing.

Assessment Method: Locally developed exams

Performance Criteria:

Score of 80% or higher.

Software Development Life Cycle

Explain the necessity of testing throughout the Software Development Life Cycle.

Assessment Method: Locally developed exams

Performance Criteria:

Score of 80% or higher.

Outline:

Course Overview
Fundamentals of Software Testing
Testing Throughout the Software Life Cycle
Static and Dynamic Testing Techniques
MS Outlook
Introduction to JIRA
Test Design Techniques
Final Project
Test Management
Tool Support for Testing