# 8/15/2020

# brcc keystone logo

Baton Rouge Community College

*Academic Affairs Master Syllabus*

Date Approved: 2 September 2020

Term and Year of Implementation: Fall 2020

**Course Title:** Virtual Infrastructure: Installation and Configuration

**BRCC Course Rubric:** CSCI 2653

**Previous Course Rubric**:

**Lecture Hours per week-Lab Hours per week-Credit Hours**: 3-0-3

**Per semester: Lecture Hours-Lab Hours-Instructional Contact Hours**: 45-0-45

**Louisiana Common Course Number:**

**CIP Code:** 11.1001

**Course Description:** Explores concepts and capabilities of virtual architecture with a focus on the installation, configuration, and management of a virtual infrastructure, Elastic Sky X (ESX) Server, and Virtual Center. Covers fundamentals of virtual network design and implementation, fundamentals of storage area networks, and virtual system management.

**Prerequisites:**  CSCI 2113 with a grade of "C" or better

**Co-requisites:** None

**Suggested Enrollment Cap:** 30

**Learning Outcomes.** *Upon successful completion of this course, the students will be able to:*

1. Demonstrate the ability to install and configure virtualization technology.

2. Demonstrate the ability to deploy, manage, and migrate virtual machines.

3. Perform management functions in cloud services including migration services and security.

4. Control user access in virtual machine technology.

**Assessment Measures.** Assessment of all learning outcomes will be measured using the following methods:

1. Instructor prepared quizzes, tests, and final exam

2. Homework assignments

3. Group/individual project

4. Oral presentations

**Information to be included on the Instructor’s Course Syllabi:**

* ***Disability Statement*:** Baton Rouge Community College seeks to meet the needs of its students in many ways. See the Office of Disability Services to receive suggestions for disability statements that should be included in each syllabus.
* ***Grading:*** The College grading policy should be included in the course syllabus. Any special practices should also go here. This should include the instructor’s and/or the department’s policy for make-up work. For example in a speech course, “Speeches not given on due date will receive no grade higher than a sixty” or “Make-up work will not be accepted after the last day of class”.
* ***Attendance Policy*:** Include the overall attendance policy of the college. Instructors may want to add additional information in individual syllabi to meet the needs of their courses.
* ***General Policies*:** Instructors’ policy on the use of things such as beepers and cell phones and/or hand held programmable calculators should be covered in this section.
* ***Cheating and Plagiarism*:** This must be included in all syllabi and should include the penalties for incidents in a given class. Students should have a clear idea of what constitutes cheating in a given course.
* ***Safety Concerns:*** In some courses, this may be a major issue. For example, “No student will be allowed in the lab without safety glasses”. General statements such as, “Items that may be harmful to one’s self or others should not be brought to class”.
* ***Library/ Learning Resources:*** Since the development of the total person is part of our mission, assignments in the library and/or the Learning Resources Center should be included to assist students in enhancing skills and in using resources. Students should be encouraged to use the library for reading enjoyment as part of lifelong learning.

**Expanded Course Outline:**

I. Virtual Technology Overview

II. Virtual switches and network connections

III. Data Storage and Management

IV. Deploy and Manage Virtual Machines

V. Administration of Virtual Machine

VI. Resource Managment

VII. Backup Strategies

VIII. Data Storage Security