

Bossier Parish Community College  
Master Syllabus

**Course Prefix and Number:** CTEC 272

**Credit Hours:** 3-3-0

**Course Title:** Advanced Topics in Linux

**Course Prerequisite:** CTEC 172

**Textbook(s):** Red Hat System Administration II – RHEL 8 RH134 -EN. The HTML textbook will be provided free of charge to the student.

**Software:** The lab environment will be provided by InfosecLearning.com. The student is required to purchase a subscription to RH 134 Red Hat Administration II – Labs. This subscription can be purchased by the student at the bookstore. This subscription needs to be purchased the first week of class.

**Course Description:** This course is mapped to the Red Hat System Administration II (RH134) course and goes deeper into enterprise Linux administration including file systems and partitioning, logical volumes, SELinux, firewalling, and troubleshooting.

**Learning Outcomes:**

At the end of this course, the student will:

- A. install Red Hat Enterprise Linux using scalable methods;
- B. access security files, file systems, and networks;
- C. execute shell scripting and automation techniques;
- D. manage storage devices, logical volumes, and file systems;
- E. manage security and system access; and
- F. control the boot process and system services.

To achieve the learning outcomes, the student will or will be able to:

(The letter designations at the end of each statement refer to the learning outcome(s).)

- 1. write simple bash scripts (C);
- 2. schedule future user and system job tasks (C);
- 3. tune system performance on a Red Hat Enterprise Server (E);
- 4. control access to files and folders using ACLs (E);
- 5. manage security using SELinux Security (E);
- 6. manage basic storage and swap space (B);
- 7. manage logical volumes (D);
- 8. manage layered storage and network attached storage (B);
- 9. control the boot process (F); and
- 10. install Red Hat Enterprise Linux (A).

**Course Requirements:**

1. A student must successfully complete the course with an average of 70% or above on the combined learning outcomes.
2. Each student is expected to attend classes regularly; excessive unexcused absences constitute grounds for suspension (refer to the student handbook for attendance policies).

**Course Grading Scale:**

A = 90 - 100  
B = 80 - 89  
C = 70 - 79  
D = 60 - 69  
F = 0 - 59

**Attendance Policy:** The college attendance policy is available at <http://www.bpcc.edu/catalog/current/academicpolicies.html>

**Course Fees:** This course is accompanied with an additional non-refundable fee for supplemental materials, laboratory supplies, software licenses, certification exams, and/or clinical fees.

**Nondiscrimination Statement:** Bossier Parish Community College does not discriminate on the basis of race, color, national origin, gender, age, religion, qualified disability, marital status, veteran's status, or sexual orientation in admission to its programs, services, or activities, in access to them, in treatment of individuals, or in any aspect of its operations. Bossier Parish Community College does not discriminate in its hiring or employment practices.

**COORDINATOR FOR SECTION 504 AND ADA**

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**Equity/Compliance Coordinator**

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