

BRISTOL COMMUNITY COLLEGE
Fall River, Massachusetts
Fall 2019
Tuesday, K105, 11 to 1:40

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SYLLABUS

CIS133 – UNIX/Linux System Administration

COURSE DESCRIPTION

This course covers the installation, administration and maintenance of a UNIX/Linux file server. The required hardware, system and network configurations will be discussed. Both LAN and WAN connections to the server will be covered before the installation procedure is presented in detail. Starting, controlling and shutting down the server will be covered, and each student will have hands on experience with their own server. User administration, as well as the UNIX/Linux file system organization and security features, are introduced after the student servers are functioning on the network. Process, mail management and performance tuning issues are also discussed near the end of the course. The course will use a computer lab where each student will have individual access to a UNIX/Linux server.

Prerequisite: CIS132 with a C or better or permission of the instructor.

COURSE OBJECTIVES

The purpose of this course is to provide the student with an understanding of how to administer a Linux based network. Students will work on Linux Servers and Clients to manage a Linux network. Each student's network will consist of a Linux Server and a Linux Client. Upon completing the course the students will know how to:

- Install a Linux Server Operating System
- Install a Linux Desktop Operating System
- Locate and use Help Resources in the Linux System
- Use the Linux Desktop
- Use the Linux Shell
- Use YaST
- Install Linux Packages
- Manage Directories and Files in Linux
- Manage Users and groups in Linux
- Manage Print Services in Linux
- Configure NFS Server
- Configure NFS Client
- Secure Folders

TEXTBOOK

No required textbook. Web Resources will be used for all topics covered in the course.

COURSE OUTLINE

See Attached.

REQUIREMENTS

The student will be required to complete all assignments. The class designated file server must be used to perform the assignments. In many cases homework assignments will build off each other, therefore students must complete assignments in the order assigned. Unless otherwise stated, these assignments will be due two weeks from the date assigned. If an assignment is submitted after the due date, there will be a 15-point deduction from the grade for each week that it is late. **Assignments more than 2 weeks late will NOT be accepted. All assignments will be available from the class website.**

There may be some class time during the course of the semester for lab work; however, most of the student's homework will be completed out of class, on their own time.

Website:

Students will be provided with an account on the instructor's web site. Each student is *required* to check the site regularly for any class announcements and posting of assignments.

EXAMINATIONS

Quizzes will be given on an as-needed basis. A cumulative 2-hour final exam will be given at the end of the course.

GRADING

Weight of exams and lab assignments:

Final Exam & Quizzes	25%
Homework Assignments	65%
Attendance, Class Participation	10%

Exams, quizzes and lab assignments will be graded on a percentage basis as follows:

A+	=	97 - 100
A	=	94 - 96
A-	=	90 - 93
B+	=	87 - 89
B	=	84 - 86
B-	=	80 - 83
C+	=	77 - 79
C	=	74 - 76
C-	=	70 - 73
D	=	60 - 69
F	=	Less than 60

TEACHING METHODOLOGY

The course is given using the lecture method and the student is encouraged to ask questions at any point during the lecture. Instructor demonstrations of procedures being taught will be provided in the classroom. Some hands-on lab work will be conducted during class time. Students are responsible for completing all lab work assigned for homework on their own time.

ATTENDANCE

On-line students are required to contact me via email at least once per week. If no contact is made over a period of 4 weeks, the student will receive an F as a final grade.

Face-to-Face students are required to attend class. If 4 weeks of classes are missed, the student will receive an F as a final grade.

WITHDRAWAL POLICY

Students are responsible for withdrawing officially if they stop attending any or all classes.

Faculty no longer have the ability to withdraw a student from a class. A grade of “F” will be assigned to any student who stops attending a course but does not officially withdraw.

Students are encouraged to meet with an advisor before making any changes to their schedule.

Withdrawals effect Satisfactory Academic Progress and can place the student at risk for academic probation or dismissal. Students who use financial aid and who subsequently withdraw may be required to return some or all funds received. Withdrawals are accepted until the tenth week of classes of a 14-week semester or an equivalent amount of class time for shorter duration courses (refer to the [Academic Calendar](#) for the exact student-generated withdrawal date for the current semester). Students may withdraw online in accessBCC, in person at any Enrollment Center, or via their college email to enrollmentservices@bristolcc.edu. Email requests must come from the student's BCC college email address and must include the student's name, BCC student ID number, and course information (CRN, course and section number).

Email from non-college accounts will not be accepted. If a student officially withdraws after the third week of classes, there will be no tuition or college fee refunds. For more information, see the [College Withdrawal Policies and Procedures](#) in the college catalog. Students with questions should contact Enrollment Services via any of the methods mentioned above or at 774-357-2590.

Plagiarism Policy (Academic Honesty)

A college community must be established on a foundation of truth and academic integrity. Bristol Community College has an obligation not only to promote these high standards of academic honesty, but also to address academic dishonesty. Academic dishonesty is demonstrated by cheating, plagiarism, and facilitating academic dishonesty.

- Cheating – Includes, but is not limited to: (1) use of any unauthorized assistance in taking quizzes, tests, or examinations; (2) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; or (3) the acquisition, without permission, of tests or other academic material belonging to a member of the College faculty or staff. Cheating shall also include the use, by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear

- acknowledgement. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials. Taking credit for work done by another person or doing work for which another person will receive credit. Copying or purchasing other's work or arranging for others to do work under a false name. (Student Handbook)
- Plagiarism – Includes, but is not limited to, the use, by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgement. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials. This would also include material that is obtained from the computer. (BCC Student Handbook)
 - Facilitating Academic Dishonesty: Students who allow their work to be used by other students or who otherwise aid others in academic dishonesty are violating academic integrity.

Read the policy online:

<http://www.bristolcc.edu/about/policiesdisclosureslegalstatements/academicpolicies/academicdishonesty/>

Disability Statement

Bristol Community College complies with federal legislation for individuals with disabilities (Section 504 of the Rehabilitation Act of 1973 and the Americans With Disabilities Act of 1990) and offers reasonable accommodations to qualified students with disabilities. It is your responsibility to notify me and the Office of Disability Services of your need for classroom accommodations. Accommodations are arranged through the Office of Disability Services/ODS, which will issue a confidential Disability Services Accommodation Form. This should be accomplished, when possible, during the first two weeks of class. If you have questions about the process, please contact ODS by calling (508) 678-2811 x2955 or stopping by B104. You may also contact ODS online at

<http://www.bristolcc.edu/locations/attleboro/campuservices/disabilityservices/>

Your commitment: For each hour in class, you should plan to put in 2 to 3 hours outside of class. You need to recognize that commitment and include it in your planning.

The course outline includes a TENTATIVE schedule of homework based on previous semesters.

COURSE OUTLINE		
WEEK #	TOPIC COVERED	RESOURCES
1 9/3/2019	Course Introductions and Overview <ul style="list-style-type: none"> ■ Course overview ■ Overview of VMWare ■ Linux Distros and overview of OpenSUSE Installation 	All reading and reference materials required for the course will be available on the course website. Assignments will be generated as the course progresses. Topics covered in assignments will coincide with concepts and tasks covered in class.
2 9/10/2019	<ul style="list-style-type: none"> ■ Installing OpenSUSE Server – In-Class lab work ■ Getting Started with Linux Linux Desktop: KDE & Gnome Getting Help 	
3 9/17/2019	<ul style="list-style-type: none"> ■ Users and Groups Create and Manage User and Group Accounts using Yast and using commands 	
4 9/24/2019	<ul style="list-style-type: none"> ■ Manage File Permissions and Ownership 	
5 10/1/2019	<ul style="list-style-type: none"> ■ Managing Files and Directories 	
6 10/8/2019	<ul style="list-style-type: none"> ■ Devices Files and mount points ■ 	
7 10/15/2019	<ul style="list-style-type: none"> ■ No Class. Monday, 10/14 is a holiday and BCC will follow Monday's schedule on Tuesday 10/15 therefore we will not meet. 	
8 10/22/2019	<ul style="list-style-type: none"> ■ Standard file system commands, hard and soft links 	
9 10/29/2019	<ul style="list-style-type: none"> ■ NFS Server 	
10 11/5/2019	<ul style="list-style-type: none"> ■ NIS 	
11 11/12/2019	<ul style="list-style-type: none"> ■ lab 	
12 11/19/2019	<ul style="list-style-type: none"> ■ User authentication 	
13 11/26/2019	<ul style="list-style-type: none"> ■ Cron and at 	
14 12/3/2019	<ul style="list-style-type: none"> ■ Sudo 	
15 12/10/2019	<ul style="list-style-type: none"> ■ lab 	