

Advanced Linux

ITSC-2425

Fall 2016 Section SECTION_301 CRN-12549 4 Credits 08/29/2016 to 12/15/2016 Modified 08/28/2016

Meeting Times

Lecture and Lab

Tuesday, Thursday, 1:25 PM to 4:05 PM, E233

Q Drop - 11/18

Final Exam - Tuesday, December 13, 12:45 - 3:00 pm

Contact Information

Instructor: Mrs. Carol Wiggins

Email: carol.wiggins@blinn.edu

Office: Brenham: BULL 104 and Bryan: E234

Phone: 979-830-4295

Website: www.bilnn.edu

Office Hours: Please call 979-830-4295, 979-398-2455, or email carol.wiggins@blinn.edu to schedule an appointment outside of my posted office hours.

Posted Office Hours

BULL 104:

Tuesday/Thursday 8:30am - 9:00am

E234:

Monday 9:30am - 10:30am

Tuesday/Thursday 4:10pm - 4:40pm

Virtual Office Hours - This is a time where I will be online and available in eCampus to answer questions.

Monday/Wednesday As Needed

Description

Provides instruction in Advanced Open-source Linux operating system. Develops LDAP directory services to all your clients, support users remotely, installing and configuring network services.

Requisites

Successful Completion of ITSC 1416 or instructor approval.

Core Curriculum Statement

This course is not a core curriculum course.

Outcomes

1. Install, administer, and manage advance network environment using a Linux system.
2. Demonstrate advance skills and proficiency with Linux utilities, configurations, deploy secure networks.
3. Integrate Linux networks with existing networks.

Materials

LPIC 2 Exam Prep Courses 1 and 2

Author: Guru Labs

Publisher: Guru Labs

Availability: Online in class

Price: \$130

Electronic books will be purchased during the first class period from Guru Labs.

Course Requirements

LPIC 2 Certification Exam

Transfers to BAAS degree at SHSU.

Transfers to BAS-IT degree at UHCL.

Evaluation

Criteria

Type	Weight	Topic	Notes
Exams	30%		Three major exams and comprehensive final exam
Labs	40%		Weekly labs
Term Paper/Project	20%		Rubric in LMS
Class Participation	10%		Daily contributions to discussion and labs

Blinn College Policies

All policies, guidelines, and procedures in the [Blinn College Catalog \(http://www.blinn.edu/catalogPDF/Admissions-Records-Financial-Aid.pdf\)](http://www.blinn.edu/catalogPDF/Admissions-Records-Financial-Aid.pdf), [Blinn College Board Policies \(http://pol.tasb.org/Home/Index/1204\)](http://pol.tasb.org/Home/Index/1204), and the [Blinn College Administrative Procedures Manual \(http://www.blinn.edu/admnpolicy/intro.htm\)](http://www.blinn.edu/admnpolicy/intro.htm) are applicable to this course.

Notice of any action taken under these protocol and procedures, by Blinn College or its employees, may be delivered by hand, through the U.S. Postal Service, or electronically to the student's BlinnBuc e-mail account. Notice shall be deemed received upon actual receipt, on deposit in the U.S. Mail, or upon entering the information processing system used by Blinn College for BlinnBuc e-mail accounts, whichever first occurs.

Civility Statement

Blinn College holds all members of the college community, which includes students, faculty, and staff accountable for their actions and words. Therefore, all members should commit themselves to behave in a manner that respects and demonstrates concern for the dignity, rights, and freedoms of others, including respect for the physical and intellectual property of all members of the college community.

Civility Notification Statement. If a student is asked to leave the classroom because of uncivil behavior, the student may not return to that class until he or she arranges a conference with the instructor; it is the student's responsibility to arrange for this conference within two school days of being notified of the suspension from class. This statement reflects step one of three possible steps in the incivility process. The Incivility Protocol is detailed in the [Blinn College Catalog \(http://www.blinn.edu/catalogPDF/Admissions-Records-Financial-Aid.pdf\)](http://www.blinn.edu/catalogPDF/Admissions-Records-Financial-Aid.pdf) and in [Blinn College Board Policy FLB \(LOCAL\) \(http://www.blinn.edu/board-policy-updates/FLB\(LOCAL\).pdf\)](http://www.blinn.edu/board-policy-updates/FLB(LOCAL).pdf).

Attendance Policy

Class attendance is essential for student success; therefore, students are required to promptly and regularly attend all classes. A record of attendance is maintained from the first day of classes and/or the first day the student's name appears on the roster through final examinations. Students who accrue one week's worth of absences during the semester will be sent an e-mail through their Buc account requiring them to contact their instructor and immediately schedule a conference to discuss their attendance issues. Students who accumulate two weeks' worth of unexcused absences, may be administratively withdrawn from class. There are four forms of excused absences recognized by the institution:

1. Observance of religious holy days - Students should notify their instructor(s) no later than the 15th day of the semester concerning the specific date(s) for absences for any religious holy day(s);
2. Representing the College District at an official institutional function;
3. Dual credit students representing the high school or independent school district at an official institutional function; and
4. Military service.

Other circumstances may be considered an excused absence at the discretion of the faculty member with appropriate documentation. College District-mandated attendance policy applies to all coursework; including coursework in developmental/non-credit courses. Failure to attend developmental classes will also result in removal from the course as defined by the College District.

It is the student's responsibility to officially drop a class he or she is no longer attending. Students interested in dropping a course or withdrawing from school may do so by logging into myBlinn and clicking on the "My Records" tab, clicking on "add or drop classes" under registration tools, and then selecting the current registration term and "webdrop" from the action drop down menu. The final step is scrolling to the bottom of the page and clicking submit. Students should contact Enrollment Services at 979-830-4800 for assistance with webdrop or to drop due to: severe illness, care for a sick, injured, or needy person, death of a close relative/relation, military duty, military duty of a close relative/relation, or change in work schedule. The last day to drop a class with a Q is set according to the [Academic Calendar \(https://schedule.blinn.edu/Astra/Calendars/ActivityCalendar.aspx?calendarId=fcbee170-67bb-11e5-828c-4f3bd2cb6abf#filter=%7B\)](https://schedule.blinn.edu/Astra/Calendars/ActivityCalendar.aspx?calendarId=fcbee170-67bb-11e5-828c-4f3bd2cb6abf#filter=%7B).

Scholastic Integrity

The Scholastic Integrity Policy is located in the [Blinn College Catalog \(http://www.blinn.edu/catalogPDF/Admissions-Records-Financial-Aid.pdf\)](http://www.blinn.edu/catalogPDF/Admissions-Records-Financial-Aid.pdf), in [Blinn College Board Policy FLDB \(LOCAL\) \(http://www.blinn.edu/board-policy-updates/FLDB\(LOCAL\).pdf\)](http://www.blinn.edu/board-policy-updates/FLDB(LOCAL).pdf), and the [Blinn College Administrative Procedures Manual \(http://www.blinn.edu/admnpolicy/Scholastic%20Integrity-](http://www.blinn.edu/admnpolicy/Scholastic%20Integrity-)

[Final%20Grade%20Appeal.pdf](#). A student accused of scholastic dishonesty is entitled to due process as outlined in these documents.

It is the responsibility of students and faculty members to maintain scholastic integrity at the College District by refusing to tolerate any form of scholastic dishonesty, including cheating, plagiarism, or any other act of dishonesty. If there is compelling evidence that a student is involved in cheating or plagiarism, the instructor will address the infraction.

Students with Disabilities

Non-Discrimination Statement

Blinn College does not discriminate against qualified individuals with disabilities in the recruitment and admission of students, the recruitment and employment of faculty and staff, or the operation of any of its programs and activities, as specified by applicable federal laws and regulations. The designated coordinator for Blinn College's compliance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990 (ADA), and the Americans with Disabilities Act Amendment Act (ADAAA) is Patricia E. Moran, M.Ed., 902 College Avenue, Brenham, TX 77833, (979) 830-4157. Students should make arrangements for disability service directly with each campus on which they attend classes. Students enrolled on the Brenham, Schulenburg, and Sealy campuses should contact (979) 830-4157 for more information. Students on the Bryan Campus should contact (979) 209-7264.

Services for Students with Documented Disabilities

Students with documented disabilities must self-identify and provide current, appropriate documentation of the disability to the Office of Disability Services (ODS) prior to receiving services. Students are encouraged to contact this office as early as possible to initiate services. Direct services to students with disabilities are provided in the following areas:

- Assessment of needs and appropriate services
- Provision of classroom and testing accommodations
- Assistance in orientation and registration procedures
- Counseling on disability related issues

Information, education, referrals, and consultation about specific disabilities are available to interested parties on request. For answers to specific questions or to request an information packet, contact the [Office of Disability Services](#) (<http://www.blinn.edu/Disability/index.html>) on the specific campus you will be attending.

Bryan Campus: (979) 209-7251; Brenham, Sealy, Schulenburg Campuses: (979) 830-4157

Final Grade Appeal

If a student wishes to appeal a final course grade, the guidelines and timeline for a three-step appeal process are detailed in the [Blinn College Catalog](#) (<http://www.blinn.edu/catalogPDF/Admissions-Records-Financial-Aid.pdf>), in [Blinn College Board Policy FLDB \(LOCAL\)](#) ([http://www.blinn.edu/board-policy-updates/FLDB\(LOCAL\).pdf](http://www.blinn.edu/board-policy-updates/FLDB(LOCAL).pdf)), and the [Blinn College Administrative Procedures Manual](#) (<http://www.blinn.edu/admnpolicy/Scholastic%20Integrity-Final%20Grade%20Appeal.pdf>).

Electronic Devices

Cellular telephones and beepers/pagers must be disengaged and kept out of sight while the student is in the Blinn College Library or any classroom/lab, unless otherwise instructed. Any noncompliance with this policy shall be addressed in accordance with the [Blinn College Administrative Procedure Manual – Electronic Devices](#) (<http://www.blinn.edu/admnpolicy/Electronic%20Devices.pdf>).

* Course Policies

Student Email

Blinn students are issued email addresses by Blinn College. Your Blinn email account is the **OFFICIAL** means of communication between the instructor and the student.

Exam Review Procedures

Regular exams will be administered online. Students are encouraged to question exam answers via research and study. Opinions are nice but will not override facts. If there is an error in the questions or answers as posted, please notify me via email so the class may receive credit and the exam may be improved.

Reading and Research

In order to be successful in the computer field one must build an extensive personal library. Different authors and imprints have varied approaches as to how they present information. Books used in the program were selected based on extensive research by the instructors; however, the approach may not be a style which you find comfortable. To fully understand content and concepts you may need to acquire additional references or visit additional sources. You are encouraged to do research on the Web, visit the Blinn Library or purchase additional texts to aid in your education.

Information Technology Lab Hours and Decorum

The Program maintains a laboratory of computers that have all required application programs required by all IT courses. Use of the laboratory is required. The normal hours of operation of this lab are 0800 to 2100. The lab is closed on weekends and College holidays.

Because the laboratory and the classroom are the same room, please guard your behavior while classes are in session. Your dress and behavior should reflect your training for a professional position. Hats will be removed while in the lab. Food and tobacco products are not permitted. Recycle bins are stationed at both ladder wells for metal and plastic containers; use them instead of the lab trash cans for recyclable materials.

Removable Hard Drives

The Program maintains a large number of removable hard drives (rhd) for use in the Dell Precision T1700 tower workstations. When the instructor determines need, a student or team will be issued a rhd for a course, which is recorded on the deconfliction sheets posted on the blue doors to the front right side of the lab. Ensure proper insertion and locking of the rhd before powering the tower, and stopping of the tower before unlocking and removing the rhd from its cradle. Keys for the cradles stay in the lab. Deconfliction sheets may also indicate statically assigned IP addresses, in addition to the name of the student. Do not use a hard drive you have not been authorized. Store your rhd with the other rhds of its series on the shelves at the front of the lab. Maintain order and cleanliness of all lab spaces.

Professional Disclaimer

Working with computers in any area provides a very challenging career. Changes in the computer industry are very rapid. The computer industry has created a 24/7 existence and service requirements are almost always an emergency. If you know anything about a computer, most users expect you to know everything. As a computer professional you are expected to keep up with the technology in almost every area. Your training and education as a Network Administrator only begins at Blinn College. To keep up with the rapid changes and the expanding environment you must continue learning every day.

The Information Technology Program at Blinn College expects students to perform in class the same way they would on the job. As a student of Information Technology you must read assignments in advance, research topics outside of class, and submit professional quality assignments. In short, you work your way through the program as if you were employed by the program. The instructors of the Information Technology Program view your time at Blinn College as on-the-job training.

The Information Technology Program is small enough that we take a serious interest in all our students. Your academic and professional development is important to us because your success is our success. You are encouraged to communicate openly with your instructors; you are also encouraged to communicate with the program coordinator for any reason.

Learning Activities

Course information will be presented and described using a wide variety of methods. These methods may include but are not limited to, any of the following: Lecture, videos, slides, projects, web searches, student research resulting in written or oral reports, guest instructors, discussion of examinations, etc.

Instructors will bring information to class from a variety of sources and will generally expand on information contained in the required readings.

Schedule

The instructor reserves the right to make adjustments as necessary to enhance achievement of Student Learning Outcomes.

Week One	Meeting Details	Lecture	Lab	Weekly
8/30	Orientation	75	75	5
9/1	Linux 1 Review	75	75	
Week Two	Meeting Details	Lecture	Lab	Weekly
9/6	Linux 1 Review	75	75	5
9/8	Linux 1 Review	75	75	
Week Three	Week 3 Meeting Details	Lecture	Lab	HRS
9/13	Exam 1	75	75	5
9/15	Capacity Planning/Boot Process	75	75	
Week Four	Week 4 Meeting Details	Lecture	Lab	HRS
9/20	Boot Process/System Recovery	75	75	5
9/22	Linux Kernel	75	75	
Week Five	Week 5 Meeting Details	Lecture	Lab	HRS
9/27	Filesystem Administration/LVM/Raid	75	75	5
9/29	Storage Device/Client Networking	75	75	
Week Six	Week 6 Meeting Details	Lecture	Lab	HRS
10/4	System Maintenance/DNS	75	75	5
10/6	DNS	75	75	
Week Seven	Week 7 Meeting Details	Lecture	Lab	HRS
10/11	Exam 2	75	75	5
10/13	DNS/Hierarchies	75	75	

Week Eight	Week 8 Meeting Details			HRS
10/18	DNS Hierarchies/Securing DNS	75	75	5
10/20	Web Server	75	75	
Week Nine	Week 9 Meeting Details	Lecture	Lab	HRS
10/25	Maintaining a Web Server	75	75	5
10/27	Maintaining a Web Server/DHCP	75	75	
Week Ten	Week 10 Meeting Details	Lecture	Lab	HRS
11/1	Samba/NFS	75	75	5
11/3	PAM/OpenLDAP	75	75	
Week Eleven	Week 11 Meeting Details	Lecture	Lab	HRS
11/8	Open LDAP/Email Servers	75	75	5
11/10	Email Servers	75	75	
Week Twelve	Week 12 Meeting Details	Lecture	Lab	HRS
11/15	Managing Email/Router and Security	75	75	5
11/17	Router and Security/OpenSSH/VPN	75	75	
11/18	Last Day to Q Drop			
Week Thirteen	Week 13 Meeting Details	Lecture	Lab	HRS
11/22	Exam 3	75	75	5
11/24	HOLIDAY	75	75	
Week Fourteen	Week 14 Meeting Details	Lecture	Lab	HRS
11/29	Final Project	75	75	5

12/1	Final Project	75	75	
Week Fifteen	Week 15 Meeting Details	Lecture	Lab	HRS
12/6	Final Project	75	75	5
12/8	Final Project	75	75	
Week Sixteen - Finals Week	Week 16 Meeting Details	Lecture	Lab	HRS
12/13 12:45 - 3:00	Comprehensive Final	5 hrs		5
	Total Contact Hours			80