

Information Tech. Security

ITSY-1342

Summer I 2016 Section SECTION_301 CRN-30412 3 Credits 06/06/2016 to 07/01/2016 Modified 06/03/2016

Meeting Times

Discussion

Monday, Tuesday, Wednesday, Thursday, Friday, 1:30 PM to 2:45 PM, Student Center 233

Lab

Monday, Tuesday, Wednesday, Thursday, Friday, 2:50 PM to 4:05 PM, Student Center 233

Contact Information

Instructor: Major Robert Carl Nelson II

Email: rnelson@blinn.edu

Office: Student Center 232

Phone: 979-209-7430

Website: <http://cit.blinn.edu> (<http://cit.blinn.edu>)

Office Hours

Monday, Tuesday, Wednesday, Thursday, Friday, 12:30 PM to 1:30 PM, Student Center 232

Schedule an appointment for best results.

Description

Instruction in security for network hardware, software, and data, including physical security; backup procedures; relevant tools; encryption; and protection from viruses.

Requisites

Prerequisites: Successful Completion of ITNW 1454 or instructor approval.

Corequisites: None

Core Curriculum Statement

This course is not a core curriculum course.

Outcomes

Employ the physical security of network infrastructure components using National Institute of Standards and Technology (NIST) Guidelines and other best practices.

Develop backup procedures to provide for data security.

Use network operating system features to implement network security.

Identify computer and network threats and vulnerabilities and methods to prevent their effects.

Use tools to enhance network security.

Use encryption techniques to protect network data.

Materials

Fundamentals of Information Systems Security Print Book and ISSA 2.0 Lab Environment

Author: David Kim and Michael Solomon

Publisher: Jones & Bartlett Learning

Edition: Second

ISBN: Book only 9781284031621

Availability: Campus Bookstore and online

Book and access code for online labs ISBN 9781284074451

Flash Drive

USB Flash thumb drive

Course Requirements

CompTIA Security+ certification exam.

Transfers to BAAS degree at SHSU.

Transfers to BAS-IT degree at UHCL.

Evaluation

Criteria

Type	Weight	Topic	Notes
Exams	50%		Four major exams and a comprehensive final exam
Labs	40%		10 hands-on labs done online
Class Participation	10%		Daily contributions to discussion and labs

Blinn College Policies

Blinn College policies on civility, class attendance; scholastic integrity; students with disabilities; final grade appeals; and electronic devices as stated in the Blinn College Faculty Handbook, Blinn College Catalog and specific technical program handbooks. All policies, guidelines and procedures in the Faculty Handbook, the Board Policy and Administrative Procedure Manuals are applicable to this course.

Civility Statement

Members of the Blinn College community, which includes faculty, staff and students, are expected to act honestly and responsibly

in all aspects of campus life. Blinn College holds all members accountable for their actions and words. Therefore, all members should commit themselves to behave in a manner that recognizes personal respect and demonstrates concern for the personal dignity, rights, and freedoms of every member of the College community, including respect for College property and the physical and intellectual property of others.

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 the student arranges a conference with the instructor; it is the student's responsibility to arrange for this conference.

This statement reflects step one in a possible four step process. The Incivility Protocol is detailed in the [Blinn College Administrative Procedure Manual \(http://www.blinn.edu/admnpolicy/Incivility-Protocol.pdf\)](http://www.blinn.edu/admnpolicy/Incivility-Protocol.pdf).

Attendance Policy

The College District believes that class attendance is essential for student success; therefore, students are required to promptly and regularly attend all their classes. The faculty shall require students to regularly attend class and shall keep a record of attendance from the first day of classes and/or the first day the student's name appears on the roster through final examinations. If a student has one week's worth of unexcused absences during the semester, he or she will be sent an e-mail by the College District requiring the student to contact his or her instructor and schedule a conference immediately to discuss his or her attendance issues. Should the student accumulate two weeks' worth of unexcused absences, he or she will be administratively withdrawn from class.

There are four forms of excused absences recognized by the institution:

1. observance of religious holy days—The student should notify his or her instructor(s) not later than the 15th day of the semester concerning the specific date(s) that the student will be absent for any religious holy day(s);
2. representing the College District at an official institutional function-If a student is asked by the College District to be an official representative of the College District at any function approved by the institution, the student shall be excused from any classes missed and must be allowed to complete all work without penalty for that absence(s) in a timely manner as directed by the faculty member;
3. a high school student representing the independent school district at an official institutional function- If a high school student is asked by the independent school district to be an official representative of the school district at any function approved by the institution, the student shall be excused from any class missed and must be allowed to complete all work without penalty for the absence(s) in a timely manner as directed by the faculty member; and
4. military service- If a student can prove he or she is serving on active duty to which he or she is called with the Armed Forces of the United States, the student shall be excused from attending classes and allowed to complete an assignment or take an examination from which the student is excused within a reasonable time after the absence.

Other absences may be excused at the discretion of the faculty member. A student enrolled in a developmental course is subject to College District-mandated attendance policies. Failure to attend developmental classes shall result in removal from the course as defined by the College District. [Board Policy FC \(LOCAL\) \(http://pol.tasb.org/Policy/Download/1204?filename=FC\(LOCAL\).pdf\)](http://pol.tasb.org/Policy/Download/1204?filename=FC(LOCAL).pdf)

It is the student's responsibility to officially drop a class he or she is no longer attending. More information on drop limits and withdrawing can be found 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). The last day to drop with a Q is according to the [Academic Calendar \(https://schedule.blinn.edu/Astra/Calendars/ActivityCalendar.aspx?calendarId=fcbee170-67bb-11e5-828c-4f3bd2cb6abf\)](https://schedule.blinn.edu/Astra/Calendars/ActivityCalendar.aspx?calendarId=fcbee170-67bb-11e5-828c-4f3bd2cb6abf).

Scholastic Integrity

Blinn College does not tolerate cheating, plagiarism, or any other act of dishonesty with regard to the course in which you are enrolled. The following text defines the faculty member's responsibility with regard to the scholastic integrity expectation for this and all courses at Blinn College. In a case of scholastic dishonesty, it is critical that written documentation be maintained at each level throughout the process.

It is the responsibility of faculty members to maintain scholastic integrity at the College District by refusing to tolerate any form of scholastic dishonesty. Adequate control of test materials, strict supervision during testing, and other preventive measures should be utilized, as necessary, to prevent cheating or plagiarism. If there is compelling evidence that a student is involved in cheating or plagiarism, the instructor should assume responsibility and address the infraction. Likewise, any student accused of scholastic

dishonesty is entitled to due process to resolve the allegation as outlined in [Blinn College Board Policy FLDB \(Local \(http://pol.tasb.org/Policy/Download/1204?filename=FLDB\(LOCAL\).pdf\)\)](http://pol.tasb.org/Policy/Download/1204?filename=FLDB(LOCAL).pdf) ([http://pol.tasb.org/Policy/Download/1204?filename=FLDB\(LOCAL\).pdf](http://pol.tasb.org/Policy/Download/1204?filename=FLDB(LOCAL).pdf)). The Scholastic Integrity Policy is located in the [Blinn College Catalog \(http://www.blinn.edu/CatalogPDF/index.htm\)](http://www.blinn.edu/CatalogPDF/index.htm).

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.

The College's facilities are accessible to students and visitors with disabilities. Designated parking spaces, ramps, handicapped restroom facilities, elevators, and assistance from College employees are readily available on all campuses. The College's faculty and staff work closely with students with disabilities to meet their individual needs.

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 \(http://www.blinn.edu/Disability/index.html\)](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 grade in a course, [Blinn College Board Policy FLDB \(Local \(http://pol.tasb.org/Policy/Download/1204?filename=FLDB\(LOCAL\).pdf\)\)](http://pol.tasb.org/Policy/Download/1204?filename=FLDB(LOCAL).pdf) ([http://pol.tasb.org/Policy/Download/1204?filename=FLDB\(LOCAL\).pdf](http://pol.tasb.org/Policy/Download/1204?filename=FLDB(LOCAL).pdf)), Course Grade Complaints, outlines the timeline and steps for appeal. This policy is located in the [Blinn College Catalog \(http://www.blinn.edu/CatalogPDF/index.htm\)](http://www.blinn.edu/CatalogPDF/index.htm).

Electronic Devices

Cellular telephones and beepers/pagers must be disengaged 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- Incivility Protocol \(http://www.blinn.edu/admnpolicy/Incivility-Protocol.pdf\)](http://www.blinn.edu/admnpolicy/Incivility-Protocol.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.

Deadlines for Assignments and Labs

Assignment Zero (Asg0), found in each course on eCampus, **MUST** be completed before a student will be allowed to take a regular exam.

Students will submit their assignments and labs **before the beginning of class** on the date the assignment is due. Credit for late submissions is at the discretion of the Instructor.

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 not required if you have access to alternate resources. Feel free to use them. 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 7/24 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

Dates	Week 1 Meeting Details	Contact in min	HRS
Monday 06 June 2016	Orientation	155	15.5
Tuesday 07 June 2016	Information Systems Security	155	
Wednesday 08 June 2016	Changing How People and Businesses Communicate	155	
Thursday 09 June 2016	Malicious Attacks, Threats, and Vulnerabilities	155	
Friday 10 June 2016	Malicious Attacks, Threats, and Vulnerabilities	155	
Dates	Week 2 Meeting Details	Contact in min	HRS
Monday 13 June 2016	The Drivers of the Information Security Business	155	15.5
Tuesday 14 June 2016	Access Controls	155	
Wednesday 15 June 2016	Access Controls	155	
Thursday 16 June 2016	Security Operations and Administration	155	
Friday 17 June 2016	Security Operations and Administration	155	
Dates	Week 3 Meeting Details	Contact in min	HRS
Monday 20 June 2016	Auditing, Testing, and Monitoring	155	15.5
Tuesday 21 June 2016	Risk, Response, and Recovery	155	
Wednesday 22 June 2016	Cryptography	155	
Thursday 23 June 2016	Cryptography	155	
Friday 24 June 2016	Networks and Telecommunications	155	
Dates	Week 4 Meeting Details	Contact in min	HRS

Monday 27 June 2016	Malicious Code and Activity	155	15.5
Tuesday 28 June 2016	Information Security Standards, Education and Training	155	
Wednesday 29 June 2016	Information Security Professional Certifications	155	
Thursday 30 June 2016	US Compliance Laws	155	
Friday 01 July 2016	Field Experience	155	
Dates	finals	Contact in min	HRS
Friday 01 July 2016	Comprehensive Final Exam - Totals 2 hours	100	2.0
	TOTAL CONTACT HOURS		64
	Note: In the Carnegie Hour system 50 minutes = 1 contact hour.		