Fundamentals of Information Security  
ITSY-1400-81400, ITSY-1000-84001  
Syllabus

Richland College  
12800 Abrams RD  
Dallas, TX 75243  
972-238-6100

School of Engineering and Technology Fall 2019

COURSE

Course ID:       ITSY 1400  
Section:        81400  
and ITSY 1000-84001  
Title:          Fundamentals of Information Security  
Meeting Time:   This is an online course and the website is always open  
Web Site:       http://ecampus.dcccd.edu

INSTRUCTOR

Name:            Craig Fincher  
Office Hours:    Via email  
Telephone:       Adjunct Faculty Office: 972-238-6140  
Office Location: eCampus Course website Discussion Area  
E-mail:          cfincher@dcccd.edu  

Note: I usually will reply within 24 hours except on holidays and weekends.
**Prerequisite:** Basic computer skills. Required tools include Microsoft Windows, the Internet, and a e-mail address/account. Much of the required work may be completed using a Mac, Linux or BSD computer. Students without a computer have access to Richland College's Computer Lab (upstairs in Del Rio Hall).

**ITSY 1400 Covers:**
- Fundamental security practices valuable to all industries
- Basic information security goals of availability, integrity and confidentiality
- Vocabulary and terminology specific to the field of information security
- Identification of exposures and vulnerabilities and appropriate countermeasures
- The importance of appropriate planning and administrative controls

**Course Learning Objectives:** Students completing this course will be able to outline best practices for the information security goals of confidentiality, integrity, and availability; explain ethical practices; define vocabulary terminology related to information security; explain the importance of planning and administration controls; identify security threats, vulnerabilities, and countermeasures; and identify procedures for security risk management.

**WECM End-of-Course Outcomes:** Outline best practices for the information security goals of confidentiality, integrity and availability; explain ethical practices; define vocabulary/terminology related to information security; explain the importance of planning and administrative controls; identify security threats, vulnerabilities, and countermeasures; and identify procedures for security risk management.

**TAKING AN ONLINE COURSE**

This is an online course. Students will not attend traditional classroom lectures, but will work with the instructor and other students via eCampus and email, and work independently in order to complete course requirements. In a traditional format, this course would require students to attend 3 hours of lecture and 4 hours of lab each week and to spend additional time reading and working with the software in order to master the material. The online format will also require a significant investment of the student's time. Students taking this course online should plan to **invest at least 7-10 hours** per week on this course.

*Online courses in general require students to be self-motivated and disciplined.* It is highly recommended that each student develops a weekly schedule for completing the required readings, assignments, quizzes and exams and that he/she **keeps on schedule**.
Textbook:

Please make sure you purchase the bundle with the lab code. Used books generally do not include the lab access code that you need for your labs.

Paper + Lab access
Title: CompTIA Security+ Guide to Network Security Fundamentals, 6th Edition (LLF) (w/6mths Access)
Author: Ciampa
Edition: Sixth
ISBN: 9781337289313
Publisher: Cengage Learning

or

Digital + Lab access
MindTap Information Security for Ciampa's CompTIA Security+ Guide to Network Security Fundamentals,
Edition: 6th
ISBN: 9781337289306
Author Ciampa
Publisher: Cengage Learning Custom Publishing

Required: Yes
Link to the book at the Richland College book store:
https://www.bkstr.com/richlandstore/follett-discover-view/booklook?shopBy=discoverViewCourse&bookstoreId=612&termId=1&divisionDisplayName=&departmentDisplayName=ITSY&courseDisplayName=1400&sectionDisplayName=81400

STUDENT RESPONSIBILITIES

1. If a student experiences any technical difficulties accessing or using eCampus, the student must immediately communicate the problem to the instructor via email. Check eCampus every day for new announcements, lecture materials, assignments, quizzes, questions, discussions, and exams.

2. Complete all assignments, quizzes, questions, and exams during the time frames specified for each.
This course will rely heavily on eCampus, which is a Web based course management program. eCampus will be used as the primary vehicle for delivering course materials, announcements, and assignments; turning in assignments to the instructor; completing quizzes and exams; viewing grades; and communicating with the instructor and each other.

Each student will be able to view his/her grades on assignments, quizzes, exams, etc. using eCampus. However, in order to access the student’s final course grade, each student will need to access his/her eConnect account.

Students will need to learn how to use the various eCampus tools.

Prior to the closing deadline for an assignment, quiz, questions, exam, or forum discussion, communicate via email any technical difficulties experienced using eCampus. Use Technical Difficulties as the subject line of the message, provide a detailed description of the problem, and clearly identify which graded component was affected.

Failure to communicate a problem prior to the closing deadline will result in the student receiving the grade recorded by eCampus, which will most likely be a zero.

If you have a personal question for me, please email me at cfincher@dcccd.edu

If your question is about text material, tests or other course content, please post your questions or comments in the discussion board area. I will monitor the discussion board every day and post a reply as soon as possible. All other students are encouraged to participate in any discussion of interest to them.

If a student encounters a hardware or software failure that makes electronic communication impossible, this constitutes an emergency and he/she should find a working computer (a friend, work, library, Richland, etc.) There will be no assignments or email interaction on the following dates:

11/28-12/1 Thanksgiving Holiday
REQUIRED MATERIALS

Students must have:

- A computer system that can access eCampus and perform the assignments/exams/tests required for this course.
- Access to the Internet and a DCCCD email account.
- A word processor that generates .txt Text files, RTF or Microsoft Word compatible documents.
- A text editor such as MS Word, WordPad, or NotePad.

POLICIES

Syllabus Change Disclaimer: The instructor reserves the right to amend a syllabus as necessary.

For Institution Policies, please refer to the Richland website www.richlandcollege.edu.

Academic Honesty Policy Scholastic dishonesty is a violation of the Code of Student Conduct. Scholastic dishonesty includes, but is not limited to, cheating on a test, plagiarism, and collusion. As a college student, you are considered a responsible adult. Your enrollment indicates acceptance of the DCCCD Code of Student Conduct published in the DCCCD Catalog.

Disability Services/Special Services: Students with a disability and/or special needs who require ADA accommodations should contact the Richland College Disability Services Office, C120, (972) 238-6180.

Withdrawal (Drop) Policy: If you are unable to complete this course, it is your responsibility to withdraw formally.

I have found in the past that some students will drop a course when help is available. If you are considering withdrawing from this course, please take some time to discuss your concerns with me. Things may not be as bad as you think and we may be able to come to some arrangement which will allow you to successfully complete the course requirements. However, you must contact me as soon as possible. Please do not wait until the last minute before the drop date deadline to contact me.

Repeating This Course: Effective for Fall Semester 2005, the Dallas County Community Colleges will charge additional tuition to students registering the third or subsequent time for a course. All third and subsequent attempts of the majority of credit and Continuing Education/Workforce Training courses will result in additional tuition to be charged.
Developmental Studies and some other courses will not be charged a higher tuition rate. Third attempts include courses taken at any of the Dallas County Community Colleges since the Fall 2002 Semester. See Third Attempt to Enroll in a Course at http://www.dcccd.edu/thirdcourseattempt/

STOP BEFORE YOU DROP
For students who enrolled in college level courses for the first time in the fall of 2007, Texas Education Code 51.907 limits the number of courses a student may drop. You may drop no more than 6 courses during your entire undergraduate career unless the drop qualifies as an exception. Your campus counseling/advising center will give you more information on the allowable exceptions. Remember that once you have accumulated 6 non-exempt drops, you cannot drop any other courses with a “W”. Therefore, please exercise caution when dropping courses in any Texas public institution of higher learning, including all seven of the Dallas County Community Colleges.

Financial Aid: If you are receiving any form of financial aid, you should check with the Financial Aid Office prior to withdrawing from classes. Withdrawals may affect your eligibility to receive further aid and could cause you to be in a position of repayment for the current semester. Students who fail to attend or participate after the drop date are also subject to this policy.

Attendance Policy: Attendance is a graded component of this course. Students are expected to respond back via email when requested. Include the Assignment or Lab Response # and date in the subject line of the email. Excluded dates are indicated above. Failure to participate will result in an attendance grade of zero for that week. Students will not be permitted to makeup an attendance grade.

Computer/Internet Policy: Richland College students have access to the Del Rio Educational Computing Lab for educational and instructional purposes. It is the instructor's expectation that each student will have their own computer with the software installed. Students using the Del Rio computer lab are required to show their Richland Student ID when requested by lab personnel. Students can obtain their IDs in Thunderduck Hall. Students are expected to follow lab policies as well as the Student Code of Conduct specified in the catalog.

Email Accounts: Each student needs to have a working email address on file with the instructor. You can receive a Richland email account if you are registered for credit classes. Visit the Del Rio Educational Computing Lab (D257) for instructions on obtaining a Richland email account if you do not have one or you would like an additional one. You must have a student ID for admission.

Grades: Student can receive their grades through through eConnect at www.econnect.dcccd.edu.
At the end of this course, each student taking this course for credit will receive a letter grade. A student's letter grade will be based on the numeric course grade that he/she earns. The numeric course grade is computed using a weighted average formula. Table 1 below indicates the graded elements of this course and the corresponding weights. Table 2 below indicates the possible numeric grades and the corresponding letter grades.

Students taking this course for continuing education credits will receive either a certificate based on a numeric grade of 70 or higher or no certificate. Letter grades will not be available for C.E. students through eConnect.

**Table 1: Graded Elements**

<table>
<thead>
<tr>
<th>Graded Element</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Weekly Quiz</td>
<td>25%</td>
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<tr>
<td>Lab</td>
<td>40%</td>
</tr>
<tr>
<td>Participation</td>
<td>10%</td>
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<tr>
<td>Final Exam</td>
<td>25%</td>
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</tbody>
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**Table 2: Letter Grades**

<table>
<thead>
<tr>
<th>Numeric Course Grade</th>
<th>Letter Grade</th>
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</thead>
<tbody>
<tr>
<td>90 to 100</td>
<td>A</td>
</tr>
<tr>
<td>80 to 89</td>
<td>B</td>
</tr>
<tr>
<td>70 to 79</td>
<td>C</td>
</tr>
<tr>
<td>60 to 69</td>
<td>D</td>
</tr>
<tr>
<td>Below 60</td>
<td>F</td>
</tr>
</tbody>
</table>
Quizzes:

During the semester, there will be a weekly chapter quiz starting in week two. Students may use their books and study materials during quizzes, but they must work alone. The quizzes will be timed so students should prepare in advance, otherwise the time constraint could have a negative impact upon their quiz grade.

There will be multiple choice questions and true/false questions on each quiz. You will have 60 minutes to complete the quiz after you begin. Once you have begun the quiz, you must finish.

Students must take a posted quiz before the due date. **Students who fail to take the quiz within the allotted time frame will receive a zero for that quiz.**

**No makeup quizzes will be permitted unless prior arrangements have been made with the instructor.**

Labs and Lab Quizzes

You will need the access code bundled with your book to access the lab. Labs are delivered via the textbook publisher’s virtual lab environment. A link to the lab environment is available from eCampus.

Participation:

You participation grade consists of your introductory post to the online discussion forum and SIX separate posts with links to Cyber security-related news articles.

Final Exam:

This course will have a comprehensive final exam covering all chapters in the book.

Reviewing Your Grades:

Each student will be able to view his/her grades on assignments, quizzes, exams, etc using eCampus. However, in order to access the student’s final course grade, each student will need to access his/her eConnect account.

Academic Progress:

Students are encouraged to discuss academic goals and degree completion with their instructors. Specific advising is available throughout the semester. Check https://richlandcollege.edu/admissions/ for more details.
The following is a tentative schedule based on class needs. The instructor reserves the right to make schedule and/or assignment changes.
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Assignments</th>
</tr>
</thead>
</table>
| 1    | 8/26-8/30  | **Class Introduction Due 8/30**  
Reading: Ch. 1: Introduction to Security                                                                                                     |
| 2    | 9/2-9/6    | **Cyber Security News Article Link Post: Due 9/2**  
Reading: Ch. 2. Malware and Social Engineering Attacks                                                                                         |
| 3    | 9/9-9/13   | **Chapters 1 Quiz Due 9/9**  
**Chapters 2 Quiz Due 9/9**  
Reading: Ch. 3. Basic Cryptography  
Lab Assignment Due 9/13                                                                                                                         |
| 4    | 9/16-9/20  | **Chapter 3 Quiz Due 9/16**  
Reading: Ch. 4. Advanced Cryptography and PKI  
Lab Assignment Due 9/20                                                                                                                          |
| 5    | 9/23-9/27  | **Chapter 4 Quiz Due 9/23**  
Reading: Ch. 5. Networking and Server Attacks  
**Cyber Security News Article Link Post: Due 9/27**                                                                                               |
| 6    | 9/30-10/4  | **Chapter 5 Quiz Due 9/30**  
Reading: Ch. 6. Network Security Devices, Design, and Technology  
**Cyber Security News Article Link Post: Due 10/4**                                                                                             |
| 7    | 10/7-10/11 | **Chapter 6 Quiz Due 10/7**  
Reading: Ch. 7. Administering a Secure Network  
Lab Assignment Due 10/11                                                                                                                       |
| 8    | 10/14-10/18| **Chapter 7 Quiz Due 10/14**  
Reading: Ch. 8. Wireless Network Security                                                                                                                                 |
| 9    | 10/21-10/25| **Chapter 8 Quiz Due 10/21**  
Reading: Ch. 9. Client and Application Security  
Lab Assignment Due 10/25                                                                                                                         |
| 10   | 10/28-11/1 | **Chapter 9 Quiz Due 10/28**  
Reading: Ch. 10. Mobile and Embedded Device Security  
**Cyber Security News Article Link Post: Due 11/1**                                                                                             |
| 11   | 11/4-11/8  | **Chapter 10 Quiz Due 11/4**  
Reading: Ch. 11. Authentication and Account Management  
Lab Assignment Due 11/8                                                                                                                          |
| 12   | 11/11-11/15| **Chapter 11 Quiz Due 11/11**  
Reading: Ch. 12. Access Management  
**Cyber Security News Article Link Post: Due 11/15**                                                                                             |
| 13   | 11/18-11/22| **Chapter 12 Quiz Due 11/18**  
Reading: Ch. 13. Vulnerability Assessment and Data Security  
Lab Assignment Due 11/22                                                                                                                        |
| 14   | 11/25-11/27| **Chapter 13 Quiz Due 11/25**  
Reading: Ch. 14. Business Continuity                                                                                                               |
| 15   | **11/28-12/1** | **Thanksgiving Holiday**                                                                                                                       |
| 16   | 12/2-12/6  | **Chapter 14 Quiz Due 12/3**  
Reading: Ch. 15. Risk Mitigation  
Chapter 15 Quiz Due 12/6  
**Cyber Security News Article Link Post: Due 12/6**                                                                                              |
| 17   | 12/9-12/12 | **Final Exam**                                                                                                                                     |