

# CISS 310 Network Security Fundamentals

## Spring 2011



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**Office Phone:** (916) 650-2926

**Office Hours:** Mon, Tues, Wed 8:50 pm – 9:50 pm  
Wed 6PM to 7PM Online  
Thurs online 7pm – 9pm

**Course Website:** <http://www.someprofs.org>

**Instructor Website:** <http://www.scc.losrios.edu/~andersk>

**Email:** andersk@scc.losrios.edu

**Course Hours:** Tues 7:00PM-8:50PM Room B103

<b>Units:</b> 3 Credit units
<b>Prerequisite:</b> None.
<b>Course Advisory:</b> CISN 140 or CISN 300 or CISN 304 with a grade of "C" or better.
<b>Acceptable for credit:</b> CSU
<p><b>Course Description:</b> Organizations today are linking their information systems across enterprise-wide networks and Virtual Private Networks, as well as increasing their exposure to the Internet. Each connection magnifies the vulnerability to unauthorized access. This course provides the fundamental knowledge needed to analyze risks to the system and implement a workable security policy that protects information assets from potential intrusion, damage, or theft. Students will learn which countermeasures to deploy to thwart potential attacks. This course will also prepare students for CompTIA's Security+ Exam.</p> <p><i>Learning Outcomes:</i></p> <ul style="list-style-type: none"> <li>• analyze security threats.</li> <li>• describe the costs of intrusion into an organization's computer system.</li> <li>• analyze the benefits of authentication and complex password techniques.</li> <li>• identify the nature of attacks and malicious code.</li> <li>• assess email security.</li> <li>• apply hardware and physical site security.</li> <li>• utilize operating system security.</li> <li>• incorporate web security.</li> <li>• define the value of intrusion detection procedures.</li> </ul> <p><b>What you need to take this course:</b></p> <ol style="list-style-type: none"> <li>1. <b>Textbook:</b> <i>Security + Guide to NETWORK SECURITY Fundamentals, Third Edition, Ciampa; Course Technology, ISBN-13 978-14283-4066-4.</i> NOTE: It will not be possible to complete this course without the text book; you will need to have your textbook the first week of the course.</li> </ol>

2. You will need **reliable** Internet access in order to view and turn in assignments. *Currently Internet Explorer is giving some students trouble with the course website. I recommend using Firefox which is free. The first page on the SomeProfs.org website before you login has links to download Firefox.* Students have also been using Safari, and Google Chrome to access the course website. The course materials are only accessible online by logging in to <http://www.someprofs.org> using your student identification number without using a “W” is required. Students should access the course a minimum of 4 days per week.
3. **Activate your Los Rios iMail account:** It is required that all students activate their iMail account during the first 2 days of class. This E-mail address will be used for all communications from your professor for this class. The course web server will email your password to your iMail email account. If you want your mail forwarded to another E-mail address, you can change it in the iMail system. Activate your iMail account here: <https://imail.losrios.edu/> . Students should check their email a minimum of 4 days per week for communication from the Professor.

Please note:

Because of e-mail viruses, Prof. Anderson does not accept e-mail from unknown sources. Therefore, all e-mail messages must include the subject **CISS 310** and **your full name** typed in the message, or the e-mail may be ignored. **Example: CISS 310 Jill Jones.**

- Do not send email attachments as they will be removed by the email filter.
- Please use proper spelling as this will help to not slow down my response.
- Only send your email one time. It will be read and replied to as necessary.
- Use the Reply button to respond to emails rather than composing a new message. This will allow me to follow the previous conversation.
- Type a meaningful subject line and give great detail in your message. An example of a good subject line would be CISS 310 Jill Jones “*File Saving Question*”. An example of a poor subject line would be “*Help*” or “*This is Kevin*”. This does not identify the class or what is needed.

4. **You must check your e-mail account regularly throughout the course**, I recommend checking your email a minimum of four times each week. Official announcements will be made by e-mail or in the new forum on the course web site at <http://www.someprofs.org/moodle>
5. You should be comfortable using word processing software, and have reasonable keyboarding skills. All assignments must be typed, and you are responsible for saving all assignments correctly. All work submitted must be typed and submitted through Moodle. It is your responsibility to ensure that I can open the files you send. **Your work must be compatible with Microsoft Office 2003 applications.** Some labs may require you to paste screen shots into a MS Word document. The course website shows the procedure to be used, which is part of the score for each assignment.


The Microsoft Office Suite can be purchased relatively inexpensively at this website <http://www.collegesoftware.org/> .

This web site and the software they sell are sponsored by the Foundation for California Community Colleges. They sell the entire MS Office Professional suite, which includes Word, Excel, PowerPoint, Access and Publisher.

**If you would prefer not to spend any money**, you can download the **OpenOffice** Suite for **free** at; <http://www.openoffice.org> OpenOffice is 99%+ compatible with all MS Office applications, and best of all, it's FREE. **You will have to make sure that you save the document you submit as a Word document.**

**Supplies:** USB drive, a 1GB one should be adequate to save a copy of most lab assignments during the lab period. I

also recommend that you save your lab files to the class hard drive as backup. Make sure you are the only one that has access to your lab assignments, if another student copies your assignments and turn them in this is a violation of the Academic Honesty Policy.

**Moodle** : In this course we will be using a course management tool called Moodle. The Someprofs.org web site will be where you will take online quizzes, obtain copies of assignments, a copy of the course outline, etc. The course uses a weekly format to make it simple to see what readings, and assignments are due. There is a **Calendar** that shows the due dates for assignments, and you will also see an **Upcoming Events** block that shows the assignment due dates. **An easy way to keep track of assignments is by clicking on the Assignments link and you will see all of the assignments and their due dates. I recommend clicking on the Assignments link and then printing the information**

### Initial Course Requirements and Submittals:

**Within the first 2 days of class, all students are required to perform the following requirements:**

- 1. Activate your Los Rios iMail account:** It is required that all students activate their iMail account during the first 2 days of class. This E-mail address will be used for all communications from your professor for this class. If you want your mail forwarded to another E-mail address, you can change it in the iMail system. Activate your iMail account here: <https://imail.losrios.edu/>
- 2. Syllabus and Online Documents:** This course syllabus and the online orientation document must be read carefully and in their entirety -- they contain important information about the course content, policies and procedures. We will go over this at the orientation meeting as well, but if you don't remember the information a copy of the syllabus is available on the course website.
- 3. Online Orientation Quiz:** During the first 2 days of class, all students must take a short quiz to verify that you understand how to access the course materials and use the Moodle online course delivery system. The syllabus and course documents at the top of the course website have the information to answer the orientation quiz questions. The quiz is located on a link in the course website. NOTE: You must score at least 90% or better on the quiz, or it must be taken again. The orientation quiz can be taken many times before the due date.
- 4. Practice Assignment.** There is a small practice assignment document on the course website. You will need to fill out the document and then submit it through the proper assignment link on the course website. The main purpose of this is to make sure everyone knows how to properly submit assignments before the first assignment is due.

**THESE REQUIREMENTS ARE MANDATORY.** If any of these requirements are not completed by the end of the first 2 days of class, you may be dropped and a student on the wait list may be selected to take your place.

**Assignments:** Assignment information will be on the Course Website. **All assignments will be due by 11:55Pm (midnight), Pacific Time, on the announced due date.** We will be doing Lab Assignments that will need to be uploaded to the online course site. There will be quizzes on each chapter & a final exam. The **Discussion Forum** in the course web site may be used for some assignments.

**You will submit assignments directly through links in the course website;** there are instructions for this on the course website. **After you submit an assignment** through the link you should see **"File uploaded Successfully"**, and you will see a copy of the file you submitted on the website. **You can always resubmit your file by just uploading again multiple times if necessary until the due date and time. I have step by step instructions on the course website if you need them**

**When saving files to send, add your last and first name at the beginning of the filename. Example: AndersonKevin\_Chapter1Assignment.doc.** Since many people will be submitting the same assignment, it is important to differentiate each file with a unique identifier (your name). Failure to do so may result in your file being overwritten by another student's file. **Putting your name in the filename will be part of the grade for each assignment, this starts with the first assignment.**

**Extra Credit Assignments:** These will involve using CyberCiege a security gaming strategy scenarios software. CyberCiege will be available for free on hard drives available for checkout in the B151 Lab. I can also burn it onto CDs for students but I will need to charge a nominal fee of \$1 to cover costs. If you use the removable drives in B151 to do extra credit make sure you have a USB drive to copy your files to. These computers do not have Internet access. You may not leave your files on the removable drives, if another student were to copy your work each students would receive zero points as per the Academic Honesty policy. These assignments can be used to make up for a missed lab.

**Due Date Policy for Assignments and Exams:** All homework, labs, quizzes and exams are due on or before their due date. Assignments may not be turned in late for any reason. This is in fairness to students who have worked hard to get their assignments in on time. Always keep a copy of all work.

**Checking Grades: It is your responsibility to check your grades,** by checking the online grade book, and notify the instructor if an assignment you submitted has not been graded. All grades will normally be posted in the grades area in Moodle within 4 days after the due date for the assignment. If you submitted an assignment but do not see your grade posted within that time, please contact me immediately via E-mail. If you do not contact me within 1 week of the assignment due date to let me know there is a problem with a grade on an assignment the current grade in the grade book will remain the same.

**Collaboration:** Assignments must be done independently unless you are told otherwise. In case of doubt ask me before you start working together. In particular, discussion of lab assignments among students is permitted and encouraged, but solutions and answers may not be copied. Your work should be your own. Another good rule of thumb is that if your hands touch the keyboard or mouse, it's your work. On the other hand, if someone is telling you what to type, it is *their* work, not yours.

#### **Student Code of Conduct:**

**Academic Honesty Policy:** Students are required to do their own work on assignments and to work alone on exams. Examples, and the consequences, of cheating are given below. Please refer to the ***Student Code of Conduct*** in the ***Sacramento City College Student Guide*** for additional examples and information.

#### **Academic Honesty includes, but is not limited to:**

##### **Cheating Examples**

1. Obtaining answers from another student for any assignment in any form and with or without his/her knowledge. In other words a students course work needs to be secured where another student can't find it and copy it or both students will receive scores of zero on these assignments.
2. Make sure that if your are using the removable drives in the B151 lab that you save all of your coursework on a usb drive and not to the removable lab drive that you are using. Coursework submitted because a student left it available for another student to copy will earn both students involved a score of zero and the Business Division Dean will also be notified.
3. Providing answers to another student during an exam (in any form).
4. Using material during an exam that is not allowed.
5. Copying – transmitting or receiving answers from others.
6. Duplicate printing of assignments in any form (electronic, E-mail, paper, etc.).
7. Having or using notes, formulas or other information in a programmable calculator or other electronic device without explicit teacher review and permission.
8. Having or using a communication device such as a cell phone, pager, PDA or electronic translator to send or receive information.
9. Taking an exam for another student, or permitting someone else to take a test for you.
10. Asking another to give you improper assistance, including offering money, favors or other benefits.
11. Asking for or accepting money or any other benefit in return for giving another improper assistance.
12. Providing or receiving information about all or part of an exam, including answers (e.g., telling someone in a subsequent period what was on your exam, or being told this information).
13. Having or using a "cheat sheet" (a piece of paper with answers, formulas, information, or notes of any kind) that is not specifically authorized by the teacher.
14. Having or using a "cheat sheet" (a piece of paper with answers, formulas, information, or notes of any kind) that is not specifically authorized by the teacher.
15. Altering a graded exam and resubmitting it for a better grade.
16. Working together on a take-home exam, unless specifically authorized by the teacher.
17. Working together on homework assignments, unless specifically authorized by the teacher.

18. Gaining or providing unauthorized access to examination materials
19. Plagiarism.

For more information click on this link [SCC Student Code of Conduct](#)

#### Consequences of Cheating

If cheating is identified, all individuals involved will receive zero points for the assignment/quiz/exam. All students involved in cheating will receive a grade of zero on any work in which cheating occurs. The matter will be referred to the Business Division Dean and Campus Discipline Officer for appropriate action.

#### **Student Conduct:**

- Netiquette refers to the protocol to be followed when communicating with others on the Internet. In this course, this protocol applies to any course communication.
- Be aware your professor has access to all activities that occur within Moodle.
- The Student Code of Conduct must be followed by all students, for more information click on this link [SCC Student Code of Conduct](#). At the professor's discretion, failure to engage in respectful and academically appropriate behavior may result in you being denied access to the course website (i.e., the equivalent of being asked to leave the classroom in an on-campus course).
- Please, see the web link [Netiquette](#) made available in your Moodle course site, in the *Online Orientation* "book". Expect questions pertaining to netiquette as part of your Orientation Quiz.
- **Students are required to conduct themselves in a courteous, respectful and professional manner when communicating with other students, lab personnel, instructional aides, and professors. This includes all E-mail communications.**

**Learning Accommodations:** If you are a student with a learning disability, a physical disability, or other special needs, please let me know as soon as possible if you need special accommodations. These discussions are best handled during my office hours or by appointment. All needs which have been verified through the disability centers on campus will be accommodated.

**Class Drop Policy:** In the event, a student decides to drop the class it is the student's responsibility to notify and complete all the necessary documentation with the admissions and records office. **Students may be dropped for non-attendance in accordance with the Sacramento City College campus policy: "Students are expected to attend all sessions of classes in which they are enrolled. A student having excessive absences may be dropped from any course by the instructor any time during the semester. Excessive absences are defined as 6% of the total hours of class time." Generally this means three missed classes.(See the catalog for additional information.) DO NOT assume that the instructor will automatically drop you off the class roster if you stop attending -- it is the student's sole responsibility to officially drop classes. Students who stop attending the class after the last date to withdraw will receive a grade of "F".** Although I may drop students for not submitting work and/or participating, DO NOT assume that the instructor will automatically drop you from the class roster. It is the student's sole responsibility to officially drop classes. Please remember to drop the class by the proper date to receive a 'W' in the class instead of an 'F'

**Changes to Syllabus:** If necessary the instructor may make changes to the syllabus. I will inform the class of any changes.

**The final grade in this class will be based on the following**

<b>Percent</b>	<b>Grade</b>
90% - 100%	A
80% - 89%	B
70% - 79%	C
60% - 69%	D
<b>0% - 59%</b>	<b>F</b>