## **Kishwaukee College**

# **Spring 2016**

## CIS 283 – 5001- Network Security +

LOCATION AND TIME: Wed 6:00-8:45 PM - Room 1373

OPEN LAB HOURS Tuesday & Wednesday 4-6PM

DATES; 1/20/16 - 5/20/16

**INSTRUCTOR Mark Uscian** 

Office: A1371

Office Hours:

Monday 4:00 - 5:15PM Tuesday 3:30 - 4:45PM Wednesday 4:00 - 5:15PM Thursday 2:00 - 3:15PM

Friday N/A

Dept Secretary (815)-825-2086 x 2030 – leave a message

Email: Muscian@kishwaukeecollege.edu

#### **COURSE DESCRIPTION**

Fundamentals of network security principles and implementation. Variety of security topologies will be discussed as well as technologies and concepts used for providing secure communications channels, secure internetworking devices, and network medium. The daily tasks involved in managing and troubleshooting security technologies will also be covered. Hands-on assignments will reinforce the concepts covered. Successful completion of this course prepares students to take the CompTIA Security+ certification exam. Three hours lcture/discussion/guided labs a week.

IAI Number: N/A

#### PREQUESITE: CIS 282 or concurrent enrollment

#### STUDENT LEARNING OUTCOMES (SLO)

- Explain and Identify Network Security Principles
- Explain and Apply Compliance and Operational Security Principles and Concepts
- Illustrate and Mitigate Network Threats and Vulnerabilities

- Demonstrate and Apply Access Control and Identity Management
- Outline and Plan Application, Data and Host Security
- Explain and Identify Network Cryptography Principles and Functions

#### TEXT(S)

- Security+ Guide to Network Security Fifth Edition, Mark Ciampa, Cengage Learning ISBN: 1-305-09391-7
- Additional three ring binder for lab exercises and handouts
- Supplemental reference handouts (provided in class)

### REQUIRED STUDENT MATERIALS

- Flash drive for storing Lab Screen Shots and Lab folders

# ADDITIONAL STUDENT REFERENCES AND THEIR LOCATIONS

Supplemental reference handouts (provided in class)

## BREAKDOWN OF COURSE REQUIREMENTS

15 Chapter Worksheets @ 30 points each		- 450 points
60 Lab Projects @ 5 points each ***		- 300 points
3 Tests @ 125 points each		- 375 points
Reports/Projects		- 100 points
	Total	1225 points

<sup>\*\*\*</sup> The total numbers of labs is subject to change

FINAL GRADE DETERMINATION: Grade reports will not be mailed out. *Please check KishSOS*, *My Student Info, under Academic Profile, Grades, for grade reports* 

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90-100\% = A - 1102 - 1225 points

80-90\% = B - 986 - 1101 points

70-80\% = C - 857 - 985 points

60-70\% = D - 735 - 856 points

< 60 = F - < 735 points
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## COURSE EXIT REQUIREMENTS: N/A

## TENTATIVE WEEKLY SCHEDULE

Please note that this schedule and the topics covered are subject to change depending upon a variety of factors. Changes will be announced in class. If you are not able to attend class, it is your responsibility to find out what was covered.

Week 1 01/20	Chapter 1 – Introduction to Security; Labs Chapter 1	
Week 2	Chapter 2 Malware and Social Engineering	

01/27	Attacks; Labs Chapter 2	
Week 3 2/3	Chapter 3 – Application and Network Attacks; Labs Chapter 3	
Week 4 2/10	Chapter 4 – Host, Application, and Data Security; Labs; Chapter 4	
Week 5 2/17	Chapter 5 – Basic Cryptology; Labs Chapter 5	
Week 6 2/24	Chapter 6 – Advanced Cryptology; Labs Chapter 6	
Week 7 3/2	Chapter 7 – Network Security Fundamentals; Labs Chapter 7 – Test Chapter 1-5	Test Chapter 1-5
Week 8 3/9	Chapter 8 – Administering a Secure Network; Labs Chapter 7 & 8	
Week 9 3/23	Chapter 9 – Wireless Network Security; Labs Chapter 9	
Week 10 3/30	Chapter 10 – Mobile Device Security; Labs Chapter 10	
Week 11 4/6	Chapter 11 – Access Control Fundamentals; Labs Chapter 11	
Week 12 4/13	; Chapter 12 – Authentication and Account Management; Labs Chapter 12	Test Chapter 6-10
Week 13 4/20	Chapter 13 – Business Continuity; Labs chapter 12 & 13	
Week 14 4/27	Chapter 14 – Risk Mitigation; Labs Chapter 14	
Week 15 5/4	Chapter 15 – Vulnerability Assessment; Labs Chapter 15	
Week 16 5/11	Project Presentations	
Final Exam 5/18	Final Exam (Chapters 11-15) - 6-7:50	

#### **MAKE-UP POLICY**

Missed labs and/or tests may or may not be made up depending upon individual circumstances. In all cases contact the instructor via email or telephone to review options and procedures for completing missed tests or labs.

#### ATTENDENCE POLICY: N/A

#### CLASS WITHDRAWAL

A "W" cannot be given as a final grade. The student is responsible for officially withdrawing from the class according to procedures described in the college catalog. Any student that does not officially withdraw from the class will receive a letter grade. The last date for withdrawal for this course can be found at "MY CLASS SCHEDULE" on KishSOS. Kishwaukee College reserves the right to administratively withdraw at midterm those students who are not actively pursuing course objectives or who are in violation of standards of behavior as outlined in the Student Code of Conduct and Discipline. For a copy of the student conduct policy, contact the Vice President of Student Services Office or refer to the Kishwaukee College catalog.

#### **INCOMPLETE GRADE**

All course requirements must be completed by the end date for the course. In the event that extremely difficult circumstances merit granting a student more time to finish course requirements, an "Incomplete" (I) grade may be given. Taking an Incomplete is possible only at the instructor's discretion. To receive an Incomplete, a contract between the student and the instructor must be completed and approved regarding the completion of all remaining work within a strictly defined period of time. If the conditions of the contract are not met, an "I" grade may revert to an "F".

### **CLASS CANCELLATIONS**

Class cancellations due to inclement weather will be posted on the College Website: www.kishwaukeecollege.edu. or announced by the local radio stations. Students may also call the College at (815) 825-2086. Class cancellations due to instructor absence will be posted on the classroom door and posted at <a href="www.kishwaukeecollege.edu/class\_cancellations">www.kishwaukeecollege.edu/class\_cancellations</a>. Room changes will be announced in advance whenever possible and posted on the classroom door.

#### ACADEMIC DISHONESTY

In order to evaluate student work, faculty must be able to trust that the work is original with a student and not the work of someone else. Cheating, falsifying information, forgery, plagiarism, and other dishonest actions will not be tolerated. Sanctions for academic dishonesty are at the discretion of the instructor and subject to appeal as provided in Student Code of Conduct and Discipline. A complete explanation of the policy and procedures surrounding academic dishonesty are outlined in the Kishwaukee College Catalog.

#### **COPYRIGHT**

As a Kishwaukee College Student, you may have copyrighted materials or software made available to you by the college for course use. Please understand that copyright law may prohibit copying these materials. Violation of copyright laws can lead to prosecution for a criminal offense. You are required to abide by the specific copyright and licensing agreements that apply to each particular piece of software.

## GRADUATION REQUIREMENTS FOR TRANSFER DEGREE STUDENTS

All students intending to graduate with an A.A., A.S., A.E.S., or A.F.A. are required to submit a complete Degree Portfolio. The Degree Portfolio is a means for the institution to measure its effectiveness in preparing students for successful completion of a degree at a transferring institution. Save your college-level work throughout your academic career in order to facilitate the portfolio compilation. Also, submit a completed application for graduation from the college the semester that you plan on graduating prior to submitting the complete Degree Portfolio. Guidelines and the specific requirements (along with the rubrics used for assessment) for the Degree Portfolio can be found at <a href="https://www.kishwaukeecollege.edu/portfolio">www.kishwaukeecollege.edu/portfolio</a>.

#### ASSISTIVE RESOURCES CENTER/DISABILITY SERVICES

Any student with a documented disability or special learning need and wanting to request accommodations, should contact the Coordinator in A1317 or at (815) 825-2086 ext 3960, (815) 825-9106 (TTY), or send an email to awilson@kishwaukeecollege.edu. The student's disability must impact their ability to participate in the educational environment and be documented by an appropriate professional prior to accommodations being approved.

#### LEARNING SKILLS CENTER (A1300)

Students must present their Kishwaukee College student ID when using any Learning Skills Center services. For more information on the Learning Skills Center go to <a href="http://www.kishwaukeecollege.edu/go/lsc">http://www.kishwaukeecollege.edu/go/lsc</a>. Tutoring is available to all Kishwaukee students free of charge. The Writing Center (Learning Skills Center, A1306) answers your writing-related questions regardless of the class or assignment. Students are expected to bring all material related to the assignment, including textbooks, paper prompts, etc.

Make-up tests, online tests, and placement tests are available through Testing Services, also located in the Learning Skills Center

## **EMERGENCY PROCEDURES/SAFETY**

Yellow and red Emergency Information flipcharts are located in each classroom. These are quick reference sheets with telephone numbers to reach emergency assistance and a brief description of the correct actions to take in the event of a tornado, fire or other emergency on campus.

## **RELIGIOUS OBSERVANCES**

Students faced with schedule conflicts related to a religious observance should make prior arrangements with the instructor a minimum of seven (7) school days in advance of the examination or other activity involved.

### STUDENT E-MAIL

Your Kishwaukee College e-mail account will be the only way to receive official notices from the College. If you choose to forward your e-mail to another account, please be advised that all communication from and within the college will use your Kishwaukee student e-mail. When communicating with instructors or employees of the college, you are required to use your Kishwaukee e-mail address.

## **COMMUNITY RESOURCES**

There are numerous community resources that are available to assist students in addressing a variety of personal needs. A listing and description of community resources can be found at <a href="http://www.kishwaukeecollege.edu/go/communityresources">http://www.kishwaukeecollege.edu/go/communityresources</a>