INFO 101 Syllabus

Fall 2020

Introduction to Computing and Security Technology College of Computing and Informatics Drexel University

Syllabus

Class

Course Number INFO 101 - 002

Term Fall

Format 3-0-3 (3 hours of class time; no lab; 3 credits)

Class Time Remote Instruction: 10:30 AM – 11:50 AM Monday

and Wednesday

Class Location Dr. Mo's Traveling Classroom!

Instructor

Name Maureen P. Kinkela Voice 973-493-8980

Email doctor.mo@verizon.net

Office Hours By Appointment

Office Location With some planning, we can arrange a Zoom meeting

most days of the week, except M-W 10:30 - 4:30, when

I am in class.

Materials

Required: Instructor selected readings

Recomended:

Kernighan, Brian,. (2017). D is for Digital.
Princeton and Oxford: Princeton University

Press.

Shakarian, P. et al., (2013). Introduction to Cyber-

Warfare. Amsterdam et al.: Elsevier.

Course Overview

Catalog Course Description:

Explores the infrastructure that makes current information and communication technology possible. Introduces foundational concepts of servers, networks, databases, and the Web. Addresses security and usability considerations that cut across all computing technology. Approaches computing technology from the perspective of system administrators who plan, manage, operate, and monitor large scale computing infrastructure. Covers emerging technologies including pervasive computing, continuous integration, virtualization, and the Internet of things. Explores professional opportunities in this high demand area.

Pre-requisites and Co-requisites: None

Curriculum Role: This is a required course for all BS CST, DS, and IS students. It may be taken by other students interested in an exploring computing and security technology.

Rationale: This course provides students with no prior computing experience an overview of computing infrastructure that enables the information and communication services that we use every day. It also provides an overview of the areas covered by the major and minor in Computing and Security Technology (CST).

Course Outcomes:

Upon successful completion of this course, a student will be able to:

- List the basic components that comprise a computing device and describe some of their characteristics
- Explain basic concepts of computer networking including how the Internet and the Web work
- Discuss emerging computer technology concepts including virtualization, DevOps, and the Internet of Things
- Explain the role and functions of system administrators
- Perform some basic file, installation, and upgrade operations using the Linux command line
- Perform basic steps to protect personal data from theft

Coursework and Grading

Discussion Board:

Every 2 weeks I will post a couple of questions on the Discussion Board, and each discussion forum will run for 2 weeks. You will have a total of four discussion forums throughout the term:

- a. Week 1 Week 2
- b. Week 3 Week 4
- c. Week 6 Week 7

d. Week 8 - Week 9

Students are expected to contribute regularly throughout the individual discussion periods to the topic(s) posed by the instructor or other classmates. The *minimum requirement is to post at least one detailed*, *in-depth post AND post comments to at least two other student in-depth posts*. These contributions should be completed during the discussion period for that particular discussion board. Your <u>detailed contribution</u> should be posted no later than the end of the 1st week of the discussion period and your responses to other <u>students</u>' contributions completed by the end of the second week of the discussion period. Each discussion period is individually graded. The weeks start on Monday and end on Sunday. Discussion threads are found in the discussion forum.

Course Grade:

Course grade will be based on the following components:

- 20% 4 Quizzes and Course Reflection
- 20% 4 Discussion Board Assignments
- 60% 4 Hands-on Activities/Exercises

Grade Scale: The following scale will be used to convert the point scale to letter grades:

Points	Grade	Points	Grade	Points	Grade
97-100	A+	83-86.9	В	70-72.9	C-
93-96.9	A	80-82.9	B-	67-69.9	D+
90-92.9	A-	77-79.9	C+	60-66.9	D
87-89.9	B+	73-76.9	С	0-59.9	F

See next page for course schedule.

Course Schedule

Week	Topic	Assignments
1	Introduction to Computing and Security	Discussion – Introductions
	Technology	
2	The Internet and the Web	Shodan Exercise (due end of week 2)
3	Components of Computing Devices	Discussion Board
4	Servers, Clients, Virtual Machines, and other	Virtual Environment Activity (due end
	devices	of week 4)
5	Databases and Data Management	Quiz (due end of week 5)
		Discussion – Check-In
6	Cybersecurity and Cyber Warfare	Quiz (due end of week 6)
7	Identity Theft and Individual Cybersecurity	Quiz (due end of week 7)
8	Access Controls, Physical Security, Social	Memorandum (due end of week 8)
	Engineering	Discussion – Check-In
9	Linux, Open Source, and Command Line	CLI Activity (due end of week 10)
	Interface	
10	Computing Technology Management and	Quiz (due end of week 10)
	Administration	

University Policies

Academic Dishonesty Policy: http://www.drexel.edu/provost/policies/academic_dishonesty.asp

Students With Disabilities: Students <u>requesting accommodations</u> due to a disability at Drexel University need to request a current Accommodations Verification Letter (AVL) in the ClockWork database before accommodations can be made. These requests are received by Disability Resources (DR), who then issues the AVL to the appropriate contacts. For additional information, visit the DR website at <u>drexel.edu/oed/disabilityResources/overview/</u>, or contact DR for more information by phone at 215.895.1401, or by email at <u>disability@drexel.edu</u>.

Course Drop Policy: http://drexel.edu/provost/policies/course-add-drop/

Course Withdrawal Policy: http://drexel.edu/provost/policies/course-withdrawal/

Missed Class Policy: (http://www.drexel.edu/provost/policies/absence.html)

Academic Honesty

The Drexel University Academic Honesty Rules and Procedures (as stated in the Student Handbook, (http://drexel.edu/studentaffairs/community_standards/studentHandbook/) will be adhered to strictly. Students who commit plagiarism or other forms of academic dishonesty may receive an "F" for both the assignment and the course.

All work must be your own. Any plagiarism and/or academic dishonesty will not be tolerated. All students are bound by Drexel's University Plagiarism / Academic Dishonesty Policy. Please review the policy in the University Student Handbook.

You are encouraged to discuss homework assignments and classes with other students, but all work submitted for grading must be your own work or the work of your project group (for group projects if assigned). It is not permitted to work with any other students on individual course exams at any time. Submitted student work may be processed via automated tools (for example Turnitin). Below is a suggested source for understanding plagiarism

https://owl.purdue.edu/owl/teacher_and_tutor_resources/preventing_plagiarism/avoiding_plagiarism/index.html

Research Advice - Individualized advising on research and citing practice for your papers is available from the CCI Librarian at siftar@drexel.edu.

Instructor Policies

Late/Missed Quiz/Assignments Policy: No late quizzes/assignments will be accepted without prior written approval of the instructor. Students must contact the instructor prior to the quizz/assignment due date.

Incomplete Policy: Incomplete grades are contingent upon instructor approval and will only be considered in extenuating circumstances beyond a student's control. The instructor is under no obligation to offer an incomplete grade. At least 70% of the graded coursework must have already been completed in order for an incomplete grade to be considered. An incomplete contract with due date for delivery of the completed work should be completed by the student and the instructor.

Course Change Policy: All information contained in this syllabus (other than the policies) may be subject to change with reasonable advance notice, as deemed appropriate by the instructor. Changes will be posted on the course Blackboard site.