University of New Mexico Valencia Information Technology (IT) Department

COURSE SYLLABUS *Spring 2018*

Course Name: IT 125: Microcomputer Operating Systems	**CRN# 45873**	
Class Days/Time/Location: TTh/9:00 – 10:15/ B127 or B123A	**Section Number: 501**	
Course Credits: 3.0		
Instructor: James Hart	**Email: hart56@unm.edu**	**Phone: 239-3435**
Office Hours/Location: MW 1:30 – 2:30, TTh 10:30 – 2:30 or ARR in B123A		

Texts & Supplies

Required: Minimum 8 Gig flash drive (the bigger the better)

Course Description & Pre- or Co-requisites

IT 125: Microcomputer Operating Systems. Introductory concepts in microcomputer operating systems. Acquaints students with practical aspects of microcomputer operating systems including file management systems, utilities, and computer peripherals. Suggested prerequisite: CS 150 with grade of C or better.

Student Learning Outcomes

Students completing this course will:
1. Explain the purpose of a microcomputer's CPU, memory and I/O.
2. Explain a computer's hardware, software, and firmware components and their functions in an operating system.
3. Explain virtualization and Vmware's components
4. Demonstrate how to install ESXi
5. Demonstrate ability to install a Microsoft operating system on a PC and in virtual space
6. Show proficiency in using the Microsoft Desktop

7. Demonstrate ability to identify, download, and install a necessary device driver in the Microsoft environment
8. Define computer virus.
9. Demonstrate the ability to download virus software and scan for viruses
10. Explain a cyberattack and demonstrate how to 'harden' a Windows system
11. Demonstrate ability to install the Linux operating system on a PC and in virtual space
12. Show proficiency in using the Linux Desktop
13. Understand how to locate resources in configuring a the Linux system
14. Show ability in using a Linux management utility to administer a Linux system
15. Explain the fundamental properties of the Linux shell and Microsoft command line.
16. Demonstrate the ability to use the command line interface (CLI) to administer the Linux and Microsoft systems.
17. Show an understanding of Linux and Microsoft processes to improve computer's speed.
18. Demonstrate the ability to configure the network interface, and configure network services.
19. Show an understanding of Linux security features.
20. Demonstrate the ability to install an operating system on a Raspberry Pi or equivalent

Course Outline

-   Computer 'parts'
-   Software and its role in any computer environment
-   Networking (Ethernet and IP)
-   VMware and the Cloud
-   Installing and administrating Microsoft Windows on a PC and in virtual space
-   Device Drivers
-   Security with Microsoft
-   Installing and administrating Linux on a PC and in virtual space
-   The command line and an introduction to scripting.
-   Linux security
-   OS processes
-   OS on small systems

Grading

The following will be used to determine your grade in this course:

	%
Tests	30
Labs	50
Final Exam	20
Total	**100**

The following scale is used to assign course grades:

Percentile Range	Grade
90-100	A
80-89	B
70-79	C
60-69	D
Below 60	F

Note: A final grade of "D" or "F" is not acceptable for this course if it is required for graduation or as a prerequisite for other courses. A final grade of "D" or "F" requires repeating this course.

Attendance

Students are expected to be on time. If you are running late please call or email. You will be contacted and dropped due to excessive unexcused absences.

Students with Disabilities

Special Services is a department that can provide students with documented disabilities and the accommodations they might need. It is also a department that can help students who think they might have a disability. Please let me know as soon as possible so I can ensure that arrangements are made to accommodate your needs. If you have a disability and prefer not to register, please discuss this with me.

Computer Lab Responsibility

Please be advised that use of computer labs on UNM properties is governed by "Policy 2500: Acceptable Computer Use" which can be found at

 http://policy.unm.edu/university- policies/2000/2500.html.

Food and drink are also prohibited in any computer lab on campus. Anyone violating these policies is subject to possible suspension and loss of computer lab privileges.

Title IX

In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered "responsible employees" by the Department of Education (see pg.15 - **http://www2.ed.gov/about/offices/list/ocr/docs/qa-201404-title-ix.pdf**. This designation requires that any report of gender discrimination which includes sexual harassment, sexual misconduct and sexual violence made to a faculty member, TA, or GA must be reported to the Title IX Coordinator at the Office of Equal Opportunity (oeo.unm.edu). For more information on the campus policy regarding sexual misconduct, see: **https://policy.unm.edu/university-policies/2000/2740.html**

Late/Make-up/Re-take Policies

Late homework or lab assignments will be penalized unless prior arrangements have been made and approved by the instructor. Make-up exams will be allowed in case of verifiable emergencies or prior arrangements are approved by the instructor.

Academic Dishonesty

Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, including dismissal, against any student who is found responsible for academic dishonesty. Any student who has been judged to have engaged in academic dishonesty in coursework may receive a reduced or failing grade for the work in question and/or for the course. Academic dishonesty includes, but is not limited to, dishonesty in quizzes, tests or assignments; claiming credit for work not done or done by others; hindering the academic work of other students; and misrepresenting academic or professional qualifications within or outside the University.

See: **https://policy.unm.edu/regents-policies/section-4/4-8.html**

Syllabus & Class Schedule:
The syllabus and class schedule are subject to change by the instructor. Changes will be made with as much advance notice as possible.

Electronic Devices in Class:
All mobile telephones must be turned off or switched to silent or vibrate mode.