

FLORIDA STATE COLLEGE AT JACKSONVILLE

COLLEGE CREDIT COURSE OUTLINE

COURSE NUMBER:	CET 1520
COURSE TITLE:	UNIX Fundamentals
PREREQUISITE(S):	None
COREQUISITE(S):	None
CREDIT HOURS:	3
CONTACT HOURS/WEEK:	4
CONTACT HOUR BREAKDOWN:	
Lecture/Discussion:	3
Laboratory:	1
Other _____:	
FACULTY WORKLOAD POINTS:	3.7
STANDARDIZED CLASS SIZE ALLOCATION:	24

CATALOG COURSE DESCRIPTION:

This course is the first of two courses teaching Linux systems administration. It is designed for Networking Services Technology majors. Students learn how to install, configure, and administer the Linux operating system on a workstation computer connected to a network. Although this course is not a certification preparation course, it may include related Linux certification material.

SUGGESTED TEXT(S):	Any Linux+ certification material OR Any LPI Level I certification material
IMPLEMENTATION DATE:	Spring Term, 2003 (20032)
REVIEW OR MODIFICATION DATE:	Fall Term, 2005 (20061) Fall Term, 2008 (20091)

COURSE TOPICS	CONTACT HOURS <u>PER TOPIC</u>
I. Linux Characteristics and Features	4
II. Installing Linux	4
III. Navigating the System	4
IV. Using	4
V. Linux Commands	4
VI. The Linux Logon Environment	4
VII. User and Group Management	4
VIII. Managing Packages and Shared Libraries	4
IX. Managing Run Levels	4
X. I/O Redirection, Variables and Shell Scripts	4
XI. Managing Processes	4
XII. Managing the Hard Drive	4
XIII. Networking with Linux	4
XIV. The X-Window Environment	4
XV. Printing	4

PROGRAM TITLE: Networking Services Technology

COURSE TITLE: Network Operating System 1

CIP NUMBER: 0615.040200 1507.030401 (AS) / 0507.030401 (AAS)

LIST PERFORMANCE STANDARD ADDRESSED:

NUMBER(S): TITLES(S):

01.0 DEMONSTRATE UNDERSTANDING OF NETWORKED ENVIRONMENTS - The student will be able to:

- 01.01 Explain the use of binary numbers to represent instructions and data.
- 01.07 Identify several advantages and disadvantages of networked and non-networked environments.
- 01.08 Describe current network environments, such as peer-to-peer and client/server.
- 01.09 Identify and discuss issues (such as security, privacy, redundancy, etc.) related to networked environments.
- 01.10 Identify and discuss issues related to naming conventions for user ids, email, passwords, and network devices.

04.0 UNDERSTAND, INSTALL AND CONFIGURE COMPUTER SOFTWARE - The student will be able to:

- 04.01 Describe the functions and major components (BIOS, task management, etc.) of a computer operating system.
- 04.02 Identify current operating systems and describe their important features.
- 04.03 Use an operating system for activities such as data and file management.
- 04.04 Identify current systems utilities and describe their functions.
- 04.05 Use system software to perform routine maintenance tasks such as backup, hard drive defragmentation, etc.
- 04.06 Use operating systems of different brands and platforms.
- 04.07 Use both stand-alone operating systems and network operating systems.
- 04.08 Create, use, and maintain system configuration files.
- 04.09 Describe the primary features and functions of the major categories of applications software (word processing, database, spreadsheet, presentation, email, browsers, etc.).
- 04.10 Use basic features of office productivity software.
- 04.11 Independently learn to perform (previously untaught) tasks using office productivity software.
- 04.12 Use software produced by multiple vendors.
- 04.13 Transmit and exchange data in a multiple vendor software environment.
- 04.14 Install and configure a microcomputer operating system, system, and application software.
- 04.15 Describe procedures for uninstalling operating system software.
- 04.16 Configure software for accessibility by disabled individuals.
- 04.17 Install and configure applications software upgrades.
- 04.18 Describe modifications necessary to an operating system (such as modifying parameters, how to handle conflicting interrupts, etc.) when installing, configuring and upgrading typical applications software.
- 04.19 Install and configure client software for connecting to LANs, WANs, and the Internet (network client, WWW browser, terminal emulation, file transfer, etc.).
- 04.20 Install and configure client software for client/server and network-based applications (e-mail, videoconferencing, database, etc.).

PROGRAM TITLE: IT Security

COURSE TITLE: UNIX Fundamentals

CIP NUMBER: 1506120106 AS

LIST PERFORMANCE STANDARD ADDRESSED:

NUMBER(S): TITLES(S):

02.0 DEMONSTRATE AN UNDERSTANDING OF NETWORKED ENVIRONMENTS, HARDWARE, AND SOFTWARE - The student will be able to:

02.01 Discuss fundamental network concepts such as topology, protocols, architecture, and internetworking

02.04 Describe the functions and hardware requirements for current popular network servers for such services as: Domain Name Service (DNS), Dynamic Host Configuration Protocol (DHCP), e-mail, the World Wide Web (WWW), proxy, etc.)

03.0 INSTALL AND CONFIGURE SECURE NETWORK SYSTEMS SOFTWARE AND UTILITIES-The student will be able to:

03.01 Install and configure current leading system software, drivers, and service packs.

03.06 Use system software to perform routine maintenance tasks such as backup, hard drive defragmentation, etc.

03.07 Install and configure a secure desktop client operating system.

03.08 Describe modifications necessary to an operating system (such as modifying parameters, how to handle conflicting interrupts, etc.) when installing, configuring, and upgrading typical applications software.

03.09 Install and configure client software for network-based applications such as e-mail, Web browsing, terminal emulation, file transfer, group conferencing, database, etc.

05.0 DEMONSTRATE AN UNDERSTANDING OF NETWORK ACCESS CONTROL SYSTEMS AND METHODOLOGY-The student will be able to:

05.01 Specify by access control mechanisms what users can do, which resources they can access, and what operations they can perform on a system



NOTE: Use either the Tab key or mouse click to move from field to field. The box will expand to accommodate your entry.

<i>Section 1</i>	
COURSE PREFIX AND NUMBER: <u>CET1520</u>	SEMESTER CREDIT HOURS: <u>3</u>
COURSE TITLE: <u>UNIX Fundamentals</u>	

Section 2

TYPE OF COURSE: (Click on the box to check all that apply)

<input type="checkbox"/> AA Elective	<input checked="" type="checkbox"/> AS Required Professional Course	<input type="checkbox"/> College Prep
<input type="checkbox"/> AS Professional Elective	<input type="checkbox"/> AAS Required Professional Course	<input type="checkbox"/> Technical Certificate
<input type="checkbox"/> Other _____		
<input type="checkbox"/> General Education: (For General Education courses, you must also complete Section 3 and Section 7)		

Section 3 (If applicable)

INDICATE BELOW THE DISCIPLINE AREA FOR GENERAL EDUCATION COURSES:

<input type="checkbox"/> Communications	<input type="checkbox"/> Social & Behavioral Sciences	<input type="checkbox"/> Mathematics
<input type="checkbox"/> Natural Sciences	<input type="checkbox"/> Humanities	

Section 4

INTELLECTUAL COMPETENCIES:

<input checked="" type="checkbox"/> Reading	<input checked="" type="checkbox"/> Speaking	<input checked="" type="checkbox"/> Critical Analysis	<input checked="" type="checkbox"/> Quantitative Skills	<input type="checkbox"/> Scientific Method of Inquiry
<input checked="" type="checkbox"/> Writing	<input checked="" type="checkbox"/> Listening	<input type="checkbox"/> Information Literacy	<input checked="" type="checkbox"/> Ethical Judgment	<input checked="" type="checkbox"/> Working Collaboratively

<i>Section 5</i>		
	LEARNING OUTCOMES	METHOD OF ASSESSMENT
•	The student can install a *NIX operating system.	Hands-on test
•	The student can manipulate commands, perform user and group management, manage the hard drive and printer, and participate in a network environment	Hands-on test
•	The student can demonstrate file system management and security	Hands-on test

Section 6 Name of Person Completing This Form: Cheryl Schmidt Date: 03/13/2008