

GREENVILLE TECHNICAL COLLEGE

Business and Technology Division Computer Technology Course Syllabus Linux Essentials IST 190

[Credit/Contact Hours](#)

[Prerequisite](#)

[Co-requisite](#)

[Course Description](#)

[Purpose of Course](#)

[Required Texts](#)

[Additional Materials](#)

[Course Outcomes](#)

[Program Student Learning Outcomes](#)

[Greenville Technical College Core Competencies](#)

[Instructional Agreement](#)

[Grading Scale](#)

[Course Policies](#)

Credit/Contact Hours:

3.0

Prerequisite:

CPT 257. Computer Technology students must obtain a minimum grade of "C" in all CPT and IST courses.

Co-requisite:

None

Course Description:

This course will provide students with the fundamental knowledge and concepts of the Linux operating system including command line functions, file systems, user and group administration, process management, text editors, and network applications.

Purpose of Course:

Students will learn to be effective users of Linux systems acquiring skills and understanding of command line functions, file systems, users and groups, bash shell, process management, text editors, network applications, searching and organizing data, and graphical applications.

GREENVILLE TECHNICAL COLLEGE

Required Texts:

1. **A Practical Guide to Fedora and Red Hat® Enterprise Linux®, Seventh Edition**, Mark G. Sobell, Prentice Hall, ISBN 978-0-13-347743-6 (Paperback)
2. NOTE: Students in traditional classes must access Blackboard for course-related information. Students in hybrid and online classes will access their online content through Blackboard.

Additional Materials:

The skills taught in this course are applicable to a wide range of careers including Linux system administration, network administration, and network security. This course will provide students with a basic understanding of the Red Hat distribution fork of Linux, including Fedora, Red Hat Enterprise Linux (RHEL) and CentOS Linux (Community ENTERprise Operating System). IST 190 is not a computer certification course, but students will gain training that will help them pass the CompTIA Linux+, Linux Professional Institute LPIC1 and LPIC2, and the Red Hat Certified System Administrator (RHCSA) certification exams. The final exam will consist of a written assessment and a skill-based hands-on assessment.

Course Outcomes:

Students who successfully complete this course will have demonstrated the skills required to accomplish the following objectives with a minimum competence level of 70 percent.

1. Navigate and manage the Linux file system.
2. Administer Linux users and groups.
3. Manage Linux file ownerships and permissions.
4. Execute commands in the Bash shell.

GREENVILLE TECHNICAL COLLEGE

5. Manage a Linux server using basic administrative skills.

The outcomes of the IST 190 course are intended to meet the Computer Technology program level student learning outcomes.

Revised 7/17/2015

Program Student Learning Outcomes:

Upon successful completion of the Computer Technology Degree students will be able to:

1. Install computer and network hardware.
2. Install computer operating systems and application software.
3. Design, create and test computer programming solutions.
4. Demonstrate the ability to take initiative, assume responsibility, and work under pressure with minimum supervision by successfully completing "hands-on" computer assignments.
5. Analyze, troubleshoot, and correct computer related technical problems.

Revised August 2012

Greenville Technical College Core Competencies:

Communication Core Competency: Students will demonstrate effective written and oral communication skills to convey information, ideas, or opinions.

- **Written Communication:** Students will demonstrate effective written communication skills to convey information, ideas, or opinions.
- **Oral Communication:** Students will demonstrate effective oral communication skills to convey information, ideas, or opinions.

GREENVILLE TECHNICAL COLLEGE

Critical Thinking Core Competency: Students will demonstrate effective reasoning, problem solving, or quantitative skills to develop an opinion or conclusion.

- Critical Reasoning: Students will employ inquiry, analysis, and synthesis of information to formulate and/or evaluate an opinion or conclusion.
- Problem Reasoning: Students will design and formulate a strategy to answer a question or achieve a desired goal.
- Quantitative Reasoning: Students will be able to analyze numerical information or observable facts resulting in informed conclusions.

Information Literacy Core Competency: Students will be able to locate, evaluate, and use information effectively from diverse sources.

Professionalism Core Competency: Students will demonstrate conduct and etiquette appropriate to the community and chosen career.

- Professionalism: Students will display professional conduct and work habits.
- Teamwork: Students will collaborate with others to accomplish a shared goal.

Instructional Agreement:

This syllabus is an agreement between the student and instructor concerning course objectives, course content, grading and other policies and procedures particular to the course as well as any posted program, departmental, and divisional policies. It is also the student's responsibility to become familiar with the Student Handbook/College Catalog found in the Student Resource area of Blackboard.

Grading Scale:

Grades for this course will be calculated as follows:

Module Tests (Online Chapter Exams) 35 percent

Labs 35 percent

Final Examination

(Written and Hands-On Lab) 30 percent

Written Final Exam 35% and Hands-On Lab Final Exam 65%

GREENVILLE TECHNICAL COLLEGE

Final letter grades will be issued as follows:

A	=	90 - 100
B	=	80 - 89
C	=	70 - 79
D	=	60 - 69
F	=	0 - 59

Course Policies:

[Click here to enter text.](#)

IST 190 – MAIN TOPICS

- **Bourne Again Shell (bash)**
- **gnome Desktop Environment**
- **Installing Red Hat Enterprise Linux and CentOS**
- **Linux File System**
- **Linux Ownerships and Permissions**
- **Linux Users and Groups**
- **Linux Utilities**
- **Networking and the Internet**

The instructor reserves the right to modify the Plan of Instruction by changing the sequence of text material or testing content. Refer to attachment one for more details about this class.