Overview

Despite all the jokes about computer folks being introverts or “nerds,” the reality is that computer folks are passionate – quite! We’re just passionate about certain things, and Linux is one of them. Linux engenders extreme passions: envy, appreciation, mistrust, scorn, giddiness, exuberance, euphoria, and control. Pick your passion, good or bad, Linux is not going away, so look out Microsoft Windows®!

Ready to get down and dirty with Linux? This class will use the online Red Hat Academy as its primary resource to facilitate learning, without additional fee beyond enrollment. We’ll explore what Linux is, how it differs from other Operating Systems (OS), evaluate its strengths and weaknesses, and develop valuable skills for the novice Linux user. Check your emotions at the door, and come experience Linux.

Course Information

CREDITS: Three (3)
CLASS SCHEDULE: TTh 13:50 – 15:20 (GCB 140)
LAB SCHEDULE: Th 15:30 – 17:00 (GCB 140)
FINAL EXAM: Fri, Dec 16, 15:00 – 16:50
CATALOG DESCRIPTION: Introduces fundamental Linux skills including login, file system, chmod, find, tar, gzip, shell, grep, uniq, nice, and tcp/ip networking.
Prerequisite(s): CIS 101

REQUIRED TEXT:
Online RedHat Academy Workbooks

SUPPLEMENTARY READINGS:
TestOut Linux+ Lab Sim, http://testout.com/products/linuxplus/LX0-101-102-Linuxplus.htm ($89 for students, valid for three years from purchase)

(3) Learning Outcomes²

As members of BYU—Hawaii, we affirm that with appropriate preparation, engagement of our faculties, and openness to improvement, we will maximize our education, which learning occurs best when we are:

1) Motivated by faith, guided by the Holy Spirit, and centered on serving God;
2) Active in the learning process;
3) Self-directed and take responsibility for our learning;
4) Engaged in meaningful reflection and self-assessment;
5) Open to changing how we think, feel, and act; and,
6) Constantly improving our capacity to study and learn effectively.

Accordingly, assignments and discussions will include specific consideration for our collective preparation, engagement, and continual improvement. Throughout the term we will focus primarily on two learning outcomes³:

a) Total Cost of Ownership (TCO) evaluation for Linux vs. alternate OS; and,
b) Novice-level usage of Linux, including: Filesystems, Shells, Users, Groups, Permissions, Data source transformation tools, Processes, and Networking.

(4) Calendar

Class will include instruction from the workbooks, supplemental information, discussion, and hands-on practice. Thursday labs are intended to allow for additional hands-on instruction, but students are NOT required to remain. All tests will be administered in the testing center. There will be opportunity to re-take two workbook tests in the testing center.

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² See Section 7 for ABET & WASC required learning outcomes.
³ For the interested student, a third learning objective will be preparation for a Linux certification, the CompTIA Linux+ Powered by LPI (LPIC I) or the Red Hat Certified System Administrator (RHCSA).
⁴ The specific schedule may vary based off classroom discussions and student interests.
(5) Grading

In conformity to our learning outcomes, Brother Smith agrees to come prepared to facilitate learning. However, you are primarily responsible for what learning occurs. Poor preparation to learn will reduce learning and classroom participation.

The online resource is RHA030 and includes eleven workbooks. The first ten each contain an optional Pretest, a Lab Test (hands-on), and a final Test (multiple choice). Each test is 100 points for a total of 2,000 points. Students must also submit a 5-10 minute video recording per workbook, (100 points) explaining key concepts, technologies, and/or commands as though teaching someone unfamiliar with the material. Videos and all accompanying notes (if any) are to be submitted online via Canvas and are due on, or before, the corresponding workbook final Test.

The final exam is an optional mock Linux+ or RHCSA certification exam and will replace your lowest score (if applicable). The exam will provide insight into IT 420 concepts and preparedness for the actual certification exams.

Assessment is individual (i.e. no “curve”) and follows the traditional scale below. No late work will be accepted; no alternate exam dates or times will be permitted. For possible score improvement, see Section (3). Govern yourself accordingly.

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(5.1) Alternate Syllabus (Grading)

Subject to Brother Smith’s approval by Sep. 27th you may devise an alternate syllabus. In the absence of an approved, signed, and filed alternate syllabus with Brother Smith, you are subject to the terms and grading as outlined in this syllabus.

(6) University Policies

Violations of University policies or Honor Code will be handled individually per appropriate policy guidelines. You are encouraged to familiarize yourself with the policies and Honor Code requirements.

(6.1) Academic Honesty

Plagiarism, fabrication or falsification, cheating, and other academic misconduct:

http://services.byuh.edu/honorcode/Academic_Honesty_Policy;

A grade of “C-” or better is required for the IT degree.
(6.2) Dress and Grooming

Men. A clean and neat appearance should be maintained. Shorts must cover the knee. Hair should be clean and neat, avoiding extreme styles or colors, and trimmed above the collar leaving the ear uncovered. Sideburns should not extend below the ear-lobe. If worn, moustaches should be neatly trimmed and may not extend beyond or below the corners of mouth. Men are expected to be clean-shaven and beards are not acceptable. Earrings and other body piercing are not acceptable. For safety, footwear must be worn in all public places.

Women. A modest, clean and neat appearance should be maintained. Clothing is inappropriate when it is sleeveless, strapless, backless, or revealing, has slits above the knee, or is form fitting. Dresses, skirts, and shorts must cover the knee. Hairstyles should be clean and neat, avoiding extremes in styles and color. Excessive ear piercing and all other body piercing are not appropriate. For safety, footwear must be worn in all public places.

http://services.byuh.edu/honorcode/Dress_and_Grooming

(6.3) Special Needs

Brigham Young University Hawaii is committed to compliance with the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act of 1973. The university makes every effort to accommodate individuals with disabilities within the scope of existing laws.

http://counseling.byuh.edu/special_needs

(6.4) Sexual Harassment

Unlawful Sexual Harassment is contrary to the teachings of The Church of Jesus Christ of Latter-day Saints, the university’s Honor Code and applicable civil rights laws and regulations. BYUH’s Honor Code requires that university personnel and students abide by Title VII of the Civil Rights Act of 1964 and Title IX of the Educational Amendments of 1972 which prohibit sexual harassment.

http://services.byuh.edu/honorcode/CES/Live_a_Chaste_and_Virtuous_Life

(7) ABET & WASC Learning Outcomes

Students will use, apply, and receive feedback in the following current areas:
• Computing and mathematics knowledge appropriate to the discipline;
• Techniques, skills, and tools necessary for computing practice; and,
• Technical concepts and practices in the core information technologies.